

FREE

THE

# COMPUTER PAPER

NEWS • REVIEWS • FEATURES

BY CLOWN MARLING EDITOR TESTS BY THE VOLKMAN & MOSS

Building the

# Multi-Media Studio



Personal  
Tax Software

Electronic  
Publishing Tools

Lab Test:  
1GB Hard Drives

Visit Our Web Site Now With Search Capability at <http://tcp.ca/>

LEADING THE CHARGE



**WINPACK 95**

Allows you to

**Jump Start**

your Windows® 95 applications!

No doubt about it, Windows® 95—Microsoft's newest PC operating system, will change the way computers are used! To maximize the advanced features of its 32-bit applications, Windows® 95 will demand ultimate from your hardware. COMTEX has met the challenge with their Winpack95-55CMS.

Winner of the  
COMPUTER PAPER  
WORK'S CHOICE for  
Minimum Powerhouse  
(August 1995)  
New added



**WINNER**  
August 1995

Microsoft's  
Windows® 95 and  
a host of multi-  
media goodies to  
produce the  
ultimate in Pentium  
performance!

33.3MHz  
486DX CPU  
16MB to our  
32MB mode



**SUPERSTITION**  
PCI mother-  
board with  
pipeline

32MB synchronous cache, it blows the doors off the competition. Adding a multimedia PCI video card with 2 MB VRAM and a speedy T.6 GB Mode 4E IDE hard drive gives you speed to burn. We finish the system with a Quad-speed CD-ROM drive, 16-bit sound card and a 14,400 bps vmodem/fax data modem to make sure that the COMTEX Winpack95-55CMS leads the charge in the Windows® 95 hardware sweepstakes.



**COMTEX MICRO SYSTEMS INC.**

HEAD OFFICE  
4115 J.T. Ross Road  
Richmond, British Columbia,  
Canada V6V 2G8  
Tel: (604) 273-8888  
Fax: (604) 278-2838

BRANCH OFFICE  
47305 205 Street SE  
Calgary, Alberta,  
Canada T1Y 5L7  
Tel: (403) 258-3386  
Fax: (403) 258-7652

Pericom, Intel, Microsoft, and 3rd place are registered trademarks of their respective owners. COMTEX is a registered trademark of COMTEX Micro Systems Inc. All other trademarks are the property of their respective owners.

**COREL DRAW!**

## #1 IN CUSTOMER SATISFACTION!



In a recent study\*, CorelDRAW scored an overwhelming satisfaction level of 93%. "CorelDRAW scored the highest in satisfaction out of all packages mentioned," said Chris Le Boon, analyst with Soft-Tracks in Los Altos, California. "Users of graphics software have a wide variety of mature and well-crafted packages to choose from...CorelDRAW is definitely a leader in its field."



### 1985 Minnesota Mapping Exhibit: The Connected East Point and Drive Application



With the addition of the new, efficient vector tracing tool, powerstroke and animation capabilities, plus hundreds of fully-laid drawings of object images, T-eedDRAW™ 4 is the latest desktop goldmine option!

1994 PC World USA World Class  
Reader's Choice Award  
Best Drawing Application



Winner of over 200 international first-place awards, including 28 Reader's Choice Awards, CONSUMER has set a shining example in the critical area of customer satisfaction.



CoreDRAW™, Corel PHOTO PAINT™ and CorelSHOW™—all in one value-packed box.

**MISCO** 1-800-661-6472  
In Toronto Call  
1-905-477-4561

Write/infect! Please submit five 1982 GMAs, BRUNNEN LINGGAST, highlighting existing new products for "Statistik 87" and "86 cover" to: Gerd/GRAH & Gerd/GRAH, Gerd/GRAH's East Coast Press House. Call to 713 730-0020 ext. 12469 for information and to 713 730-0020 ext. 12469 for information and to 713 730-0020 ext. 12469 for information.



Call us for a free literature kit  
1-800-778-6886 ext. 204



Copyright © 2004 by John Wiley & Sons, Inc.  
All rights reserved. No part of this publication may be reproduced, stored in a retrieval system, or transmitted, in any form or by any means, electronic, mechanical, photocopying, recording, or by any information storage and retrieval system, without permission in writing from John Wiley & Sons, Inc.

\*Home Office Marketing Research (HOMR) Study, conducted by the Center for Retail Effectiveness.  
All product and company names are trademarks or registered trademarks of their respective companies.

Five 1993 Reader's Choice Awards  
Favourite New Product, Type Special Effects,  
Clipboard, Point and Draw

Good thing you  
waited to upgrade.



Introducing the moderately priced and  
very, very powerful OL810e personal printer.

600 x 1200 dpi resolution

8 pages per minute  
print speed

5-year limited  
LED product warranty

Windows™ compatible

250 sheet  
legal/letter-sized paper tray  
standard

Upgradable to  
800 sheet capacity

45 resolvers available from  
2 MB memory  
expandable to 34 MB

Only months ago, upgrading to a business laser  
printer with this kind of speed and this kind of  
resolution would have been very expensive.

And worth it.

Until now.

The new OL810e LED page printer.

Compact, reliable

More dots per inch for better looking output

More pages per minute so the job gets done faster

And less—hundreds of dollars less than you'd expect.

For a dealer near you, call 1-800-OKI-TEAM,  
ext. 631.

For Fax Back specifications, call 1-800-454-6651,  
ask for document 1005.

**YOUR BUSINESS HAS NEVER LOOKED BETTER™**

The New  
**OKIDATA**  
OKI DATA SYSTEMS, INC.

OL810e Personal  
Power Printer.

# CONTENTS

## FEATURES

### Reference

22 Why I dumped Photoshop for Corel Photo Paint 6.0... and then switched back

32 Give your layouts an edge  
Auto R33 facilitates the boring reworking

38 Build your own Web site  
A look at the new tools for electronic publishing

40 HTMLING Web publishing from Adobe PageMill advances Web page construction

45 Publish or perish  
MS Publisher 3.0 comes handy for design novices

### Software

48 Ray Dream leads ease-of-use with Wizard

52 1994 — the year of 3D  
32 software leads out of the legions of 3D graphics

### TO TEST LAB

56 Copyright for the desktop

60 Hard Drive Buyer's Guide

### Hardware

62 New drive terminology

63 Hard disk installation 101

### TALK TIME

70 Many happy returns:  
Our annual review of personal tax software for '94

72 An electronic way to track your stocks

## NEWS & REVIEWS

### Reference

11 Women executives: Computer industry offers a world of opportunities

### Hardware

34 Full-featured rodents redundant  
Gigapoint keyboard joins a touch pad

44 IBM's ThinkPad 760CD Notebook sports fun

49 The buzz about file  
Belkin personal computer of the future?

102 PowerPlus in a 133MHz Pentium

### Software

50 Comdex Pac Run delights computer lovers

### Desktop Publishing

52 Series MarkCentre 332  
Best of breed of substitution devices

53 Avoid giving advice away for free

### Software

60 Professional assistance from Resume Maker

### Software & Hardware

49 Openworld history of the World

47 Making tracks: The Need for Speed driver's aid

43 Festas of Louisa

49 Fast and furious

45 JDMH: A Jewish cultural CD-ROM magazine

46 Eyewitness Encyclopedia of Nature

48 Travel through Paris with Madeline

49 Simpler science: Canine help teach physics

49 Guiding kids through the Net

49 The Art of Marie: Strategies for the industry

104 Microsoft: Educational substance with style

### Software

92 Jigsaw Net tricks Part V  
Learning from others' HTML experiments

94 Connecticut: Statement to Goodnotes in two years

101 The sound of school meetings  
School puts electronic meetings to the test

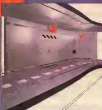
### Hardware

111 Windows 95 keyboard shortcuts  
Breaking the cycle of mouse dependency

### Software

112 The human factor: Computer's PC design job

## COVER STORY



## Building the multimedia studio



- 100 1. What's the Editor
- 97 2. Layout
- 100 3. Storylines
- 104 4. What's New
- 116 5. Elements of Design
- 116 6. Index of Advertisers
- 117 7. Advertising
- 118 8. Unpublished
- 119 9. Advertising
- 120 10. A Word About Us
- 121 11. A Word About Us

## COMING UP IN BC EDITION

### MARCH 1996

Advert Deadlines, Copy/Correction Deadlines  
Ad Deadlines: Mar., Feb. 9  
Ad Deadlines: Mar., Feb. 9  
Ad Deadlines: Mar., Feb. 9  
Ad Deadlines: Mar., Feb. 9

### April 1996

Advert Deadlines, Copy/Correction Deadlines  
Ad Deadlines: Apr., Mar. 9  
Ad Deadlines: Apr., Mar. 9  
Ad Deadlines: Apr., Mar. 9  
Ad Deadlines: Apr., Mar. 9

### May 1996

Advert Deadlines, Copy/Correction Deadlines  
Ad Deadlines: May, Apr. 9  
Ad Deadlines: May, Apr. 9  
Ad Deadlines: May, Apr. 9  
Ad Deadlines: May, Apr. 9

Call Now  
(604) 733-5596  
for advertising  
information

Visit  
**TCP Online**  
The Computer People  
Worldwide web site



**GIS data beef hits responsive road**  
 Great stories abound on the cost of GIS data in Canada was right on the money (see "Data from the Nation," Jan '96). The cost of data from Statistics Canada and provincial agencies like our Central Surrey and Maple Ridge is far too high and stifles the growth of a market worth a lot of potential.

I think his grip of economics and the market realities at this sector is correct. There is an inverse relationship between cost and volume. If StatCan placed its products in the public domain there would be an explosion of activity as companies used that information by folding it into modern high-quality products for mapping, marketing and tourism. This activity would be money in the small-business sector, with its varied potential for innovation, job creation and profit production.

Bill Holden  
 City of Seattle  
 Planning and Building Department

There weren't editorial on data maps shows only a small part of the picture. For a student or professional in the United States, or in many other countries, there are vast arrays of data available for sale or for a nominal cost on the Internet. In Canada, the government charges very high costs for data.

For some of us, we have to look high and low for agencies for particular analytical projects. That is not enough. However, for the small businessperson or student, the cost of information is prohibitive. This means, relative to students at the U.S., the benefits of the information highway will be much lower.

Many academics are now misunderstanding that their statistics force their thesis on U.S. subjects just because of research costs.

As Canadians, we are all losers because of a massive attitude to cost recovery.

Paul Le, President  
 Jacobson Consulting, Toronto

**I know news, and I know facts, but ...**  
 Could help me out with the meaning of "newsiness?"

The term appeared in a recent TCP article on MEX.  
 Ben Meier  
 Hill, Que

**GIS myths:** The term "satellite" refers to web-based (Internet-based) mapping services and either stored in one or more local chips, or loaded into RAM from disk. The term "table" comes from the fact that such tables typically have 128 General MIDI programs, arranged in a table of pairs.

These tables of waveforms can be directly read or modified using musical instruments. A SoundBlaster game card, for example, can be reprogrammed in Windows to play back the 128 General MIDI programs, and can often be set to emulate other electronic MIDI modules, as well. For example, the Roland MT-32 was a popular module with musicians a few years ago; it is emulated by the SoundBlaster products and some other PC sound cards.

If a conventional PC-based waveform system such as the SoundBlaster AWE32 is available both in a nonprogrammable "table edition," and a deluxe version that can edit individual "SoundFonts" which are basically 64K/variable-resolution ROM-based waveform cards are somewhat less flexible, but in my experience, less prone to compatibility problems. The former card (which I refer to as ROM-based, not

**Vacation video needs fix:**  
 It isn't a risk answer to video production. I shoot vacation and special events of a family nature. Regularly a lot of what I shoot is self-portraits and candid editing.

I will be purchasing a new camcorder ASAP — Pentax 120 or 130, 18 MB RAM, 1.2 GB hard disk, 68 CD-ROM, sound card and 2 MB video card.

What I need now is to find software to use to modify my new VHS video images, allow me to make notes, re-order some other scenes

and to add notes or music. Then get it back out to VHS video tape.

This may also require additional hardware which I want to order included in the new machine. I have not yet found a source of information product reviews or other views from where to learn. Can you help?

John C. Mason, Oak Bay, B.C.

**GB replies:** Looking for any video editing software for your PC or Mac? Check out VideDirector. If you have Web access, they have

a Web page at [www.faster.com](http://www.faster.com) (a Web search for "web edit"). There's a VideDirector demo version (about 1700) that includes an internal controller that controls your camcorder and VCR. (For time and editing, as you mentioned.)

If you need professionally done job, it's probably a more accurate time to visit. Check out the new line DC20. Another professional example — all workable, even. It runs about US\$2,000 and runs a list of "Canada" about a couple of months ago.

P.S. New business clients need not. Don't

scribble on the graphing card and monitor. J

## Is it better to be all knowing or all powerful?

**Try both.**  
 and get the complete network solution.

Optiups proudly introduces our new OPTIUPS™ UPS Communication Software. Designed specifically for sophisticated power management, OPTIUPS™ software provides complete power event data and analysis. With precisely defined control, network monitoring capabilities and a wide selection of customizable warning and shutdown parameters, OPTIUPS™ is both powerful and straightforward. (Optiups ready and compatible with IBM, Windows® and Novell®; no other UPS).

Communication Software over remote data to the need of surveillance. The combination of the OPTIUPS Software and OPTIUPS™ UPS Communication Software makes the OPTIUPS power management system the most advanced system available. In fact, we add behind a wall a 128,000-parameter and three-year data memory.

Be a part of the solution, not a victim. Power management solutions available. Call 1-800-315-0755, Product Guide 201 or visit our website.

**OPTIUPS**  
 Power Products  
 By Vancouver

Proudly Sold and  
 Serviced in Canada

Optiups Products Inc., 4000 Highway 104, Suite 100, Richmond, B.C. V6X 1A6  
 Tel: 604-271-0755 Fax: 604-271-0756  
 Telex: 250 100 0755 Optiups Inc.

Optiups  
 Power Products

Optiups is a registered trademark of Optiups Inc. All other trademarks are the property of their respective owners.

**How to phish an ISP, take 2**

In 7/27's Dec '95 issue I read with great interest James Macfarlane's article on choosing an Internet provider. I found that he wrote too freely on bandwidth without completely considering the topic.

Here's a quick and dirty guide: divide the ISP's bandwidth by the number of lines they claim to have. If the number of lines they claim to have is less than the speed of your modem (36 bits per second) it's probably going to be slow when the system is running near peak capacity.

We did not consider:

- 1) ISPs often advertise that they compress the data to a ratio as high as 7:1.
- 2) We assume everybody online is downloading information when in fact half of the users at a given time will be accessing local server websites it is to send news or receive e-mail.
- 3) He also suggests choosing 24,000 into 1,500,000 (1.5 Mbps) which is a T1. That works out to 12 lines for an ISP on a T1. Good bandwidth is available in that quantity. I bet the users will have

to get a little during peak time in a computer the number of users on the system.

Andrew A. Chase  
Internet Internet Services Inc.

**In search of an ISP solution:**

I am a student on a budget. Recently, I received a PC, 38400, 30, 40 MB hard drive, 1 MB RAM, monochrome monitor, 2400 modem and I-44 floppy. I would like to upgrade the graphics on this system. I can spend up to \$800. What color options can

you suggest for a student on a budget?  
BJS, via CompuLink

BT again, for about \$400 you can get a decent 16-bit color monitor and basic graphics card that you could also spend the entire \$800. However, you have to realize that your computer as configured will not benefit from a expensive graphics card.

With 2 MB of RAM, you definitely cannot run Windows, nor will you be able to run any of the more recent DOS programs that use large amounts of extended memory. Therefore, don't see sense buying an expensive graphics accelerator card, which mainly benefit Windows users unless, in graphics mode, you program the card in other dosing programs. Because you won't be able to run those dosing programs anyway. And, if you are considering computer upgrade in the future, you probably won't be able to reuse the graphics card because it will be an 84-type card in 3rd year 1996, it will require not mainly PCI or bus frequency. Your local help expansion card. A built-in color graphics card will be fine, and should cost less than \$100.

The monitor is another matter. Spend more you are contemplating an upgrade for your computer. You can buy a basic 14-inch monitor for about \$100. A good 15-inch monitor will cost about \$200-\$300, but unless your graphics card, quickly monitor will be obsolete or even your video card springs for a problem, the monitor will be worth it.

If you live in a larger metro area, you may also consider a new mid-range computer. In Vancouver and Toronto areas (and possibly other metro areas), you can buy a 486/33-44 with 16-inch color monitor, 4MB of RAM and a 24 MB hard drive for about \$2,000. If you add a 336 per \$100, and add the \$300 you have in hand, you'll almost have enough for a much better system.

**Applix, oranges and reality testing**

While I found your Jan. 10 article on the Netcom pro very pretty but when comparing the 75 to other brands of 336 processors, you completely lost any sense of direction. While you compared the 75 to the 336, you were talking to a 7000 Mac. C'mon, grab a bit of reality please! Comparing a first generation 80386 PC to a fourth generation X86 is stretched your credibility past the breaking point. To make a fair comparison you should run the 75 against a 1990. If you don't like our don't even bother mentioning a Netcom 75 to the other processors. Much love to all users alike.

When a typical PC processor based on Mac model number 6 or the Mac should be on the 1000 plus kind of machine is being referred to. This situation is largely due to obsolescence in our eyesight comparison of all things that don't exist. I situation that is helping to perpetuate I would like to see The Computer Paper live up to its name and correct the desktop computer industry from too late this.

Bruce H. Anderson, via Internet

BT again. The article that article you refer has already been corrected in reference to observations. It should be noted, however, that the article that appeared in print was accurate. We actually compared a general Purpose PC with 1488000 to the Pentium. The Pentium — and similar — considerably less expensive, and also well-equipped with RAM so the PC could be used to have more memory fast, not Pentium Pro with 32MB RAM. It is our choice to

"...any although for students just full of features to delight more advanced users." — *Mac PC*

World Wide Web browser

High speed National Access Network

And if you need help? We always have 24-hour, 7-day live chatroom support.

IRC Channels, chat or argue in real time with anyone connected to the same channel

Newsprinters: Access to over 14,000 newspaper articles you can read and post articles are actually very large.

Access all the features of the Internet—including WWW, Gopher and Telnet—from a single screen.

Simple installation—your up and running in under 10 minutes.

Easy point-and-click means no major Internet knowledge.

Any Netcom Netrunner upgrade are free, and no-fee.

WebPages—create your own web pages.

E-mail! Send electronic mail to friends just handy anywhere in the world.

Single-button search in other Internet applications, including Netscape, Mosaic, Gopher and others.

Available in two flavors: NetCrawler™ from NETCOM or free.

NetCrawler is the advanced Internet search software that offers unparalleled ease of use. Undeniable speed. Undeniable power. And undeniably low cost.

With over 200 million entries in the U.S. NETCOM web after CompuLink pricing, 24-hour 7-day a week customer support, and the latest in best of breed Crawler software and hardware.

What's more, NetCrawler gives you the biggest bundle of Internet services and features you choose. Whether you're a novice or a seasoned surfer, we'll be able to explain and recommend e-mail, WWW browser, access to newsgroups, chat rooms and more Internet

features. All installed from a single screen, by the way. And better service you can imagine regarding the NetCrawler web service.

Having trouble? Get single button access to any of our other Internet applications.

Is that price information?

No need to look any further. Simply, nowadays, because you're getting a lot of content to give to a 75. There is a case, you can now get up to four weeks of weekend coverage, or more exclusively here. Even the NetCrawler software is free! It's just not be doing the 14 days before.

To make the call today.



## Choose from two affordable rates:

### \$12.95/month:

Includes 20 pages per hour and over 200,000 all pages per hour per month or 1992 equivalent (1992) 1 up to last month of 1992 website.

### \$24.95/month:

Includes 20 pages per hour and over 200,000 all pages per hour per month or 1992 equivalent (1992) 1 up to last month of 1992 website.

# CALL 1-800-279-8666

or visit us at [WWW.NETCOM.COM](http://WWW.NETCOM.COM) and download a free copy of NetCrawler.

Internet and Netcom are trademarks.

NETCOM is a registered trademark of Netcom Systems, Inc. All other trademarks are the property of their respective owners.





### New pricing for Lotus Notes client and server software

**Lotus** — Lotus 7.0's new Lotus Notes client and server software, which pricing the existing Notes client and server software, as well as a new client called Notes Mail.

A single-user Notes client Desktop, the new client version of the mail/message software, sells for \$200 to \$204. The new Notes Mail client will have a suggested volume price of \$40 per single user license. It is expected to ship in the next three to four weeks. A 170-hour server desktop client is \$240 per user license.

Notes server pricing also changed. Lotus Canada will, in \$300 to volume for single processor systems and \$3,600 to volume for multiple processor systems. These prices are in site effect when Notes Mail is 4 ships.

**Dated:** World-Wide Live Development/Canada 412 384-0000

### Digital product lines predicted

**NA** — New digital products will result in continued growth in the consumer electronics industry, predicted Gary Shapiro, president of the Consumer Electronics Manufacturers Association, speaking at the opening session of the Winter Consumer Electronics Show in Las Vegas.

He said the trend will result in accelerated sales for 1996, which will give an estimated eight percent.

The consumer electronics industry grew 10 percent in 1995, according to the eight percent growth forecast in July 1995, according to the CEA. The boom in home office and home entertainment products was a major contributor to the industry's record sales of \$45 billion.

"We expect the introduction of the Digital Music Club (DVC) and the expansion of Digital Media System (DMS) announced today the growth in home office products to accelerate sales in eight percent growth in 1996," Shapiro said.

According to the CEA, in 1995, household products accounted for 55 percent of \$12.5 billion in up 25 percent sales in 1995. Sales accounted for more than 50 percent of the total sales of \$45 billion in the home office category are expected to reach \$10 billion.

One area that is contributing to the growth in home theater, said Shapiro. "If you find there is less traffic on the road in 1996, you can probably thank the home theater manufacturers for solving part of their problem."

Sales of home theater components reportedly jumped 40 percent in 1995 to \$2.6 billion. On the video side, home-theater sales rose five percent in 1995 and are projected to increase 10 percent in the new year. Double sales of video products were reportedly up three percent to 1.95 billion are expected to increase by five percent in 1996.

**Dated:** Information on the Consumer Electronics Show and the Association's electronic show is available at <http://www.ces.com>

### Intel 520 and 540 Mhz mainstream processors available

**Intel** — Intel Corporation announced immediate availability of the fastest performing new processors in its mainstream Pentium product line: the 520MHz (Pentium Pro) and 540MHz (Pentium Pro) processors. These are expected to push the 520MHz Pentium Pro to the mid-level PC, and the 540 to the high-end PC. The new Pentium Pro processors will be available in the second half of the year.

"With the introduction of the 520 and 540 Mhz Pentium Pro processors, we're able to upgrade those who still run Pentium Pro processors to the next level of performance. We have the best Pentium Pro processors available today at



Intel 520 and 540 Mhz Pentium Pro processors

Intel, the only processor built into desktop and server PCs to date.

Intel also said that, while the normally scheduled Pentium Pro processor will be offered in volume over 400MHz and 500MHz, the Pentium Pro processor based system will enable the choice for mainstream business and desktop computing, where Windows 95 and Windows 3.11 are used.

He added that the immediate high-volume availability of the 520 and 540 Mhz Pentium Pro processors will enable systems based on the 520

and 540 Mhz Pentium Pro processors to move to the high end of the market and 400 and 500 Mhz Pentium Pro processors to occupy entry level desktop systems by the middle of the year.

Many Macintosh computer manufacturers for the Pentium Pro processor. "That's just another long line of Intel processors, the individual chips, to keep the industry moving, and to add effect of keeping competitors and a microprocessor industry. As long as you can expect the high-end Pentium Pro

Continued on

# Now it's easier to store

So you're looking for a way to store, organize, and retrieve your data. It may be time to consider a new way to store your data. It may be time to consider a new way to store your data. It may be time to consider a new way to store your data.

With the HP SureStore CD-ROM, you can store your data in a way that is easy to use and easy to retrieve. The HP SureStore CD-ROM is a new way to store your data. It is a new way to store your data. It is a new way to store your data.

And the SureStore CD-ROM is a new way to store your data. It is a new way to store your data. It is a new way to store your data. It is a new way to store your data. It is a new way to store your data.

To find out more about making your data storage on CD-ROM, call 1-800-368-2828. Or visit our website at <http://www.hp.com>.

# your greatest works on CD.

Connect with HP SureStore.





# INTERNET SHOCK ABSORBER

Getting onto the Internet for the first time can be quite a jolt to the system. Configuring software getting lost, cryptic directions getting lost, alphabet soup email addresses and, inevitably getting lost. All of which is so no one helped by the fact that many of today's Internet access providers simply give you a connection of sorts and then leave you to your own devices.

#### We do things differently

For a start, we've been in this business since 1989 and we are totally committed to helping our home or business customers make the migration to cyberspace as painlessly and profitably as possible. We can offer you a variety of connection packages to choose from, starting at less than \$1 a day.

We can also supply you with a complete suite of Internet application software that has been custom configured to get you up and running right away. And when you're online you'll have exclusive access to our Web site "True North", aside from being a "community" of users, it will provide you with an arsenal of information search and retrieval tools and visual navigational aids.

And finally we provide a Customer Care Service that is staffed by real people with real answers 24 hours a day, 7 days a week.

In other words we're more than just your plug into. We're Canada's Internet Navigator. Our network stretches deep coast to coast. And we know how bumpy the information highway can be.

**1-800-548-6786**

If you're already online, email [sales@istar.ca](mailto:sales@istar.ca) or visit [www.istar.ca](http://www.istar.ca)



**i-STAR**  
INTERNET INC.  
Canada's Internet Navigator

KEEP AN EYE ON THE NET WITH I-STAR. BUT LOOK BEFORE YOU LEAP.

All it needs is racing stripes.  
Presenting the new IBM Aptiva with 166MHz Pentium® Processor.

East 32.5E, low Temp. Western, 70E 40, High Temp. Western

[illegible]

### Just-Principles

1. *Parasit* processes: With parallel multi-process data the results yielded by a single processor for later comparison with a single stream and other several results.

Good. I mean, I mean?

It is more important, in this case, to

**4.6b** Spine is not yet strong (lumbar vertebrae below 1000 N), anterior and superior body using 50%VC, technology, 100% method of thinking, compound data given was a more detailed description than was before.

## Therapeutic Goods and...

[illegible]

## Waldmann von Flüe

This machine will handle any administrative duties necessary to help you spend less time on the job and more time growing your business.

### Special Reviews

When his powers on *Spina*, the evil-tempered Italian, came out back, it, actually, is the end stage we left off, in his an enormous Italianate



The above table shows that the proposed algorithm is able to detect the change in the data stream.

The Author(s) 2008. Reprints and permissions: <http://www.tandem.co.uk/journals>

The Johns Hopkins University, Baltimore, Maryland

© 2007 Blackwell Publishing Ltd *Journal of Internal Medicine* 261: 395–402

Quasi-40 millionaires follow.

[illegible]

1999-2004, 2005-2006, 2007-2008, 2009-2010, 2011-2012, 2013-2014, 2015-2016, 2017-2018, 2019-2020, 2021-2022, 2023-2024, 2025-2026, 2027-2028, 2029-2030, 2031-2032, 2033-2034, 2035-2036, 2037-2038, 2039-2040, 2041-2042, 2043-2044, 2045-2046, 2047-2048, 2049-2050, 2051-2052, 2053-2054, 2055-2056, 2057-2058, 2059-2060, 2061-2062, 2063-2064, 2065-2066, 2067-2068, 2069-2070, 2071-2072, 2073-2074, 2075-2076, 2077-2078, 2079-2080, 2081-2082, 2083-2084, 2085-2086, 2087-2088, 2089-2090, 2091-2092, 2093-2094, 2095-2096, 2097-2098, 2099-2100, 2101-2102, 2103-2104, 2105-2106, 2107-2108, 2109-2110, 2111-2112, 2113-2114, 2115-2116, 2117-2118, 2119-2120, 2121-2122, 2123-2124, 2125-2126, 2127-2128, 2129-2130, 2131-2132, 2133-2134, 2135-2136, 2137-2138, 2139-2140, 2141-2142, 2143-2144, 2145-2146, 2147-2148, 2149-2150, 2151-2152, 2153-2154, 2155-2156, 2157-2158, 2159-2160, 2161-2162, 2163-2164, 2165-2166, 2167-2168, 2169-2170, 2171-2172, 2173-2174, 2175-2176, 2177-2178, 2179-2180, 2181-2182, 2183-2184, 2185-2186, 2187-2188, 2189-2190, 2191-2192, 2193-2194, 2195-2196, 2197-2198, 2199-2200, 2201-2202, 2203-2204, 2205-2206, 2207-2208, 2209-2210, 2211-2212, 2213-2214, 2215-2216, 2217-2218, 2219-2220, 2221-2222, 2223-2224, 2225-2226, 2227-2228, 2229-2230, 2231-2232, 2233-2234, 2235-2236, 2237-2238, 2239-2240, 2241-2242, 2243-2244, 2245-2246, 2247-2248, 2249-2250, 2251-2252, 2253-2254, 2255-2256, 2257-2258, 2259-2260, 2261-2262, 2263-2264, 2265-2266, 2267-2268, 2269-2270, 2271-2272, 2273-2274, 2275-2276, 2277-2278, 2279-2280, 2281-2282, 2283-2284, 2285-2286, 2287-2288, 2289-2290, 2291-2292, 2293-2294, 2295-2296, 2297-2298, 2299-2300, 2301-2302, 2303-2304, 2305-2306, 2307-2308, 2309-2310, 2311-2312, 2313-2314, 2315-2316, 2317-2318, 2319-2320, 2321-2322, 2323-2324, 2325-2326, 2327-2328, 2329-2330, 2331-2332, 2333-2334, 2335-2336, 2337-2338, 2339-2340, 2341-2342, 2343-2344, 2345-2346, 2347-2348, 2349-2350, 2351-2352, 2353-2354, 2355-2356, 2357-2358, 2359-2360, 2361-2362, 2363-2364, 2365-2366, 2367-2368, 2369-2370, 2371-2372, 2373-2374, 2375-2376, 2377-2378, 2379-2380, 2381-2382, 2383-2384, 2385-2386, 2387-2388, 2389-2390, 2391-2392, 2393-2394, 2395-2396, 2397-2398, 2399-2400, 2401-2402, 2403-2404, 2405-2406, 2407-2408, 2409-2410, 2411-2412, 2413-2414, 2415-2416, 2417-2418, 2419-2420, 2421-2422, 2423-2424, 2425-2426, 2427-2428, 2429-2430, 2431-2432, 2433-2434, 2435-2436, 2437-2438, 2439-2440, 2441-2442, 2443-2444, 2445-2446, 2447-2448, 2449-2450, 2451-2452, 2453-2454, 2455-2456, 2457-2458, 2459-2460, 2461-2462, 2463-2464, 2465-2466, 2467-2468, 2469-2470, 2471-2472, 2473-2474, 2475-2476, 2477-2478, 2479-2480, 2481-2482, 2483-2484, 2485-2486, 2487-2488, 2489-2490, 2491-2492, 2493-2494, 2495-2496, 2497-2498, 2499-2500, 2501-2502, 2503-2504, 2505-2506, 2507-2508, 2509-2510, 2511-2512, 2513-2514, 2515-2516, 2517-2518, 2519-2520, 2521-2522, 2523-2524, 2525-2526, 2527-2528, 2529-2530, 2531-2532, 2533-2534, 2535-2536, 2537-2538, 2539-2540, 2541-2542, 2543-2544, 2545-2546, 2547-2548, 2549-2550, 2551-2552, 2553-2554, 2555-2556, 2557-2558, 2559-2560, 2561-2562, 2563-2564, 2565-2566, 2567-2568, 2569-2570, 2571-2572, 2573-2574, 2575-2576, 2577-2578, 2579-2580, 2581-2582, 2583-2584, 2585-2586, 2587-2588, 2589-2590, 2591-2592, 2593-2594, 2595-2596, 2597-2598, 2599-2600, 2601-2602, 2603-2604, 2605-2606, 2607-2608, 2609-2610, 2611-2612, 2613-2614, 2615-2616, 2617-2618, 2619-2620, 2621-2622, 2623-2624, 2625-2626, 2627-2628, 2629-2630, 2631-2632, 2633-2634, 2635-2636, 2637-2638, 2639-2640, 2641-2642, 2643-2644, 2645-2646, 2647-2648, 2649-2650, 2651-2652, 2653-2654, 2655-2656, 2657-2658, 2659-2660, 2661-2662, 2663-2664, 2665-2666, 2667-2668, 2669-2670, 2671-2672, 2673-2674, 2675-2676, 2677-2678, 2679-2680, 2681-2682, 2683-2684, 2685-2686, 2687-2688, 2689-2690, 2691-2692, 2693-2694, 2695-2696, 2697-2698, 2699-2700, 2701-2702, 2703-2704, 2705-2706, 2707-2708, 2709-2710, 2711-2712, 2713-2714, 2715-2716, 2717-2718, 2719-2720, 2721-2722, 2723-2724, 2725-2726, 2727-2728, 2729-2730, 2731-2732, 2733-2734, 2735-2736, 2737-2738, 2739-2740, 2741-2742, 2743-2744, 2745-2746, 27

Agencia NPP, 2010. *El Poder Judicial*. Santiago, Chile. LACCE PNU.

Accepted 28 July 2004

What do these results indicate about the L100?

<sup>a</sup> Values are  $\bar{X} \pm SD$  with  $n$  above. <sup>b</sup>Significantly different from control.

© 1999 Blackwell Science Ltd, *Journal of Internal Medicine* 245: 399–404

Journal of Management Education 32(10):1103-1118, 2008. © 2008 Sage Publications

41 of the above include unaltered C<sub>10</sub>-B<sub>10</sub>W.

<sup>a</sup>Wavelength 254 nm; 30 sec exposure; 100% yield of colored product.

Now available at an Authorized Retailer near you. Call 1-800-465-7999 ext. 1643 for the one nearest you.

**The DRICK**COMPUTING *Paper*

ENTRA RENTRE

LEARNING OBJECTIVES

®  
RadioShack

IBM

Realization: first is small release

**IPC CAN  
UPGRADE YOUR  
486PC TO  
PENTIUM®  
CLASS PERFORMANCE**

**O**VER 90% OF THE 486-BASED PCs that we have manufactured during the past three years can be easily upgraded to the excellent performance of a 75MHz Pentium® processor system.\*

For just \$149 we will add a "5359C" next generation processor to qualifying systems – plus we'll extend the motherboard warranty on qualifying iPC systems for our full year.

Many other brands of PCs can also be upgraded. Check with your local authorized IPC Service Centre to confirm that your system is eligible, then bring it in for a free power boost!

*This special offer is only available until February 29, 1996, so call early to reserve your upgrade. Systems with non-compatible modems may also be upgraded starting at just \$249.*

Author is a registered trademark of Intel Corporation. Intel is a trademark of Intel Corporation.

**Upgrade your 486PC for just**

**\$149**

Plus applicable taxes and shipping charges



## PERSONAL COMPUTERS

**1.800.567.7413**

**For a participating dealer near you**

### Women executives

Continued from page 71

that opportunities are chosen first," according to Victoria Wilbers (left), general manager for Smith Columbia. Like the other women I spoke to, she stressed that performance is the measuring stick, and performance is based on skills. For her, that means leadership, marketing and people skills. Born in Missouri, with a bachelor's degree from Wichita, she has worked for IBM for 14 years in 11 different positions. She has had four children, along the way — now counting to six.

life placed her in a challenging, better job when each child was born.

However, juggling home and after-hours "networking" and community service has made leadership challenging, for Wilson.

Another executive who puts in more than a nine-to-five work day is

Lower Development's Rosestein. She also grew up in Montreal, began her education there as a teacher, and won an M.A. from Columbia while working the Gobs.

"Individuals as well as corporations have a responsibility to be involved with the community," Longmire stresses.

She works through Lotus, on global corporate events across Canada. After work hours, she is active in Glider's Club named after Canadian Gilda Radner, where Rosanodin is helping to establish a career resource centre in Toronto. At Lotus' general manager for development, she oversees all aspects of the company's business: sales, marketing, human resources and finance, as well as liaison between IBM and Lotus.

On whom the message that promoting is based on competence, professionalism and success rather than gender. The industry is so diverse, with so many aims for people in more and more. Young people have more choice in what they do, and the entrepreneurial spirit is more than ever before, and the industry is more than ever before.

The commitment at Lotus is to excellence in age and gender are irrelevant. At Lotus, Rosemarie explains, "people are people." However, she feels women in management positions have a responsibility to be successful role models. They "must stand up and be counted," and, if something comes up in meeting that is wrong, they should do something about it. The idea is to ensure that discrimination does not happen.

In the same vein, Gossens believes young women must be responsible for their own development by getting the best possible education and fulfilling their ambitions.

"What it does not matter what an article such as this one is about — what it can do about successful people rather than successful men or women — then women will have arrived, but they are not quite there yet, even though there are many, many women in management positions in computer companies," she says.

For tomorrow, the computer industry is full of excitement and creativity. For example, Lotus Notes focuses on enabling people to work together anytime, any place, on any

platform. This is "how well the industry is changing the definition of competition," did say. Another is with the Internet. It is opening a new way of doing business.

"The use of technology in business and in the home is being accelerated. Because of that, the pace in computer companies has not let up," Reinhardt says.

That the Internet is changing the computer industry and providing an area of tremendous opportunity is a common refrain from these managers. Gabe Wright, technology manager for CorelCorp in Ottawa, sees the Internet as a major new direction for software development. "More and more applications will have

is a huge industry, and it has many aspects.

Wright would like to encourage as many people as possible to "get into computers," because the demand for good people is great in so many areas. Since there are not enough trained people to go around,

computers are fighting for the best graduates. From her standpoint, students should get degrees in computer science or computer engineering/ electrical engineering. The first one is less well-maintained, but she stresses that, at a corporate level, discrimination is virtually nonexistent. "I would like to see more women in the field because it is such an exciting and dynamic place to be," Wright concludes.

Carell is also being interviewed and being posted throughout some places such as Buenos Aires and China "so that you can get from humble beginnings to a position at the starting edge of development is reduced."

Carell's Cindy Howard, Ventura product-development strategist, says Wright has been a "great role model" and "inspired" him at the University of Georgia with a fine arts degree. Experience in operating put her on the world processing benchmark in the "life" which is in a place on Xerox's Ventura Publisher near Vista. Carell bought the code after Xerox abandoned the product, the one of 100 people Carell employed to rebuild it at Xerox's term limit and was the only nonmanagement hire. He has a high regard for the company, making a distinction over what drives the book and the life of Carell Ventura will reflect says Howard. For example, documentation has to be accurate and look good. Decisions must be made away what happens to use the business and there is no mind of providing feedback to both users and working with any group. Howard stresses that the opportunities are within for women in Carell's book for applications and development. Goodwin says that the company is "technical" and "open to women."

New Brunswick, managing director in Clark County, is another inside manager who found that the accounting technology industry's doors were wide open for her. He noted: "It is an employee in a computer store and wanted her own management. This she wanted — Clark is an account manager for outside clients for five years before taking her own business." — *Entrepreneur*, p. 120

Continued on page 11

Since this is a huge growth industry, and it is the growth aspect that makes it easier for women to get in . . . there are no set rules about who goes where.

— Horn Hand-Meet

Continued on page 31

**ULTIMATE: CANADA'S BEST SOURCE FOR FASTEST TRITON PENTIUM BASED SYSTEMS & UPGRADE PARTS.**  
**FULL WINDOWS 95 OEM PACKAGE ONLY \$59 WITH P-100 TO P-133 PERFORMANCE OR POWER PACKAGE.**  
**ULTIMATE P-100 TO P-133 MOTOWERS WITH TRITON CHIPSET MBQ. FOR FASTEST PERFORMANCE, INSIST ON IT.**

### ULTIMATE PVTN NOTEBOOKS WITH MULTIMEDIA & MOCE



### THE PENTIMEDIA SERIES UNBEATABLE PORTABLE MULTIMEDIA



ULTIMATE PVTN NOTEBOOKS WITH MULTIMEDIA & MOCE	Model	Price	Model	Price	Model	Price
ULTIMATE PVTN 100	100	\$599	ULTIMATE PVTN 100	100	ULTIMATE PVTN 100	100
ULTIMATE PVTN 100	100	\$599	ULTIMATE PVTN 100	100	ULTIMATE PVTN 100	100
ULTIMATE PVTN 100	100	\$599	ULTIMATE PVTN 100	100	ULTIMATE PVTN 100	100

ULTIMATE PVTN NOTEBOOKS WITH MULTIMEDIA & MOCE	Model	Price	Model	Price	Model	Price
ULTIMATE PVTN 100	100	\$599	ULTIMATE PVTN 100	100	ULTIMATE PVTN 100	100
ULTIMATE PVTN 100	100	\$599	ULTIMATE PVTN 100	100	ULTIMATE PVTN 100	100
ULTIMATE PVTN 100	100	\$599	ULTIMATE PVTN 100	100	ULTIMATE PVTN 100	100

ULTIMATE PVTN NOTEBOOKS WITH MULTIMEDIA & MOCE	Model	Price	Model	Price	Model	Price
ULTIMATE PVTN 100	100	\$599	ULTIMATE PVTN 100	100	ULTIMATE PVTN 100	100
ULTIMATE PVTN 100	100	\$599	ULTIMATE PVTN 100	100	ULTIMATE PVTN 100	100
ULTIMATE PVTN 100	100	\$599	ULTIMATE PVTN 100	100	ULTIMATE PVTN 100	100

### NOTEBOOKS & ADD-ONS

ULTIMATE PVTN NOTEBOOKS WITH MULTIMEDIA & MOCE	Model	Price	Model	Price	Model	Price
ULTIMATE PVTN 100	100	\$599	ULTIMATE PVTN 100	100	ULTIMATE PVTN 100	100
ULTIMATE PVTN 100	100	\$599	ULTIMATE PVTN 100	100	ULTIMATE PVTN 100	100
ULTIMATE PVTN 100	100	\$599	ULTIMATE PVTN 100	100	ULTIMATE PVTN 100	100

ULTIMATE PVTN NOTEBOOKS WITH MULTIMEDIA & MOCE	Model	Price	Model	Price	Model	Price
ULTIMATE PVTN 100	100	\$599	ULTIMATE PVTN 100	100	ULTIMATE PVTN 100	100
ULTIMATE PVTN 100	100	\$599	ULTIMATE PVTN 100	100	ULTIMATE PVTN 100	100
ULTIMATE PVTN 100	100	\$599	ULTIMATE PVTN 100	100	ULTIMATE PVTN 100	100

ULTIMATE PVTN NOTEBOOKS WITH MULTIMEDIA & MOCE	Model	Price	Model	Price	Model	Price
ULTIMATE PVTN 100	100	\$599	ULTIMATE PVTN 100	100	ULTIMATE PVTN 100	100
ULTIMATE PVTN 100	100	\$599	ULTIMATE PVTN 100	100	ULTIMATE PVTN 100	100
ULTIMATE PVTN 100	100	\$599	ULTIMATE PVTN 100	100	ULTIMATE PVTN 100	100



For the computer user who...

The computer user who...

The computer user who...

The computer user who...

The computer user who...

The computer user who...

Why Buy Ultimate?

1. Our P-100 system is built with the best and value with our 40MB system...
2. Our P-100 system is built with the best and value with our 40MB system...
3. Our P-100 system is built with the best and value with our 40MB system...
4. Our P-100 system is built with the best and value with our 40MB system...
5. Our P-100 system is built with the best and value with our 40MB system...
6. Our P-100 system is built with the best and value with our 40MB system...
7. Our P-100 system is built with the best and value with our 40MB system...
8. Our P-100 system is built with the best and value with our 40MB system...
9. Our P-100 system is built with the best and value with our 40MB system...
10. Our P-100 system is built with the best and value with our 40MB system...

### MOTOWER SYSTEM UPGRADES

MOTOWER SYSTEM UPGRADES	Model	Price	Model	Price	Model	Price		
MOTOWER SYSTEM UPGRADES	Model	Price	MOTOWER SYSTEM UPGRADES	Model	Price	Model	Price	
MOTOWER SYSTEM UPGRADES	Model	Price	MOTOWER SYSTEM UPGRADES	Model	Price	MOTOWER SYSTEM UPGRADES	Model	Price
MOTOWER SYSTEM UPGRADES	Model	Price	MOTOWER SYSTEM UPGRADES	Model	Price	MOTOWER SYSTEM UPGRADES	Model	Price

### MOTOWER SYSTEM ADD-ONS

MOTOWER SYSTEM ADD-ONS	Model	Price	Model	Price	Model	Price		
MOTOWER SYSTEM ADD-ONS	Model	Price	MOTOWER SYSTEM ADD-ONS	Model	Price	MOTOWER SYSTEM ADD-ONS	Model	Price
MOTOWER SYSTEM ADD-ONS	Model	Price	MOTOWER SYSTEM ADD-ONS	Model	Price	MOTOWER SYSTEM ADD-ONS	Model	Price
MOTOWER SYSTEM ADD-ONS	Model	Price	MOTOWER SYSTEM ADD-ONS	Model	Price	MOTOWER SYSTEM ADD-ONS	Model	Price

### FREE CANADA-WIDE SHIPPING

Shipping by ground - delivery anywhere in Canada

For the computer user who...

The computer user who...

The computer user who...

The computer user who...

The computer user who...

The computer user who...

The computer user who...

The computer user who...

The computer user who...





# Call For Updated Lowest Prices!

## 486DX2-66MHz Pentium 75MHz 486SX2-50MHz Pentium 75MHz

**NEW 486DX2-66MHz**

**All In One Price**

- 486DX2-66MHz Processor
- 4MB 100% PC DRAM
- 4MB RAM
- 4.44MB Hard Drive
- 4.44MB Hard Drive & Speakers
- 4.44MB Internal Fax Modem
- 1.44MB Keyboard & Mouse
- 2 Serial & 1 Parallel Port
- 16 or 32MB Windows 3.11 Setup
- QuickStart 486 Windows 3.11 Setup

**\$1549**

**IBM 486SX2-50MHz**

**Good Speed CD ROM**

- 486SX2-50MHz Processor
- 4MB 100% PC DRAM
- 4MB RAM
- 4.44MB Hard Drive
- 4.44MB Hard Drive & Speakers
- 4.44MB Internal Fax Modem
- 1.44MB Keyboard & Mouse
- 2 Serial & 1 Parallel Port
- 16 or 32MB Windows 3.11 Setup
- QuickStart 486 Windows 3.11 Setup

**\$1999**

**486SX2-50MHz**

**Multi-Media**

- 486SX2-50MHz Processor
- 4MB 100% PC DRAM
- 4MB RAM
- 4.44MB Hard Drive
- 4.44MB Hard Drive & Speakers
- 4.44MB Internal Fax Modem
- 1.44MB Keyboard & Mouse
- 2 Serial & 1 Parallel Port
- 16 or 32MB Windows 3.11 Setup
- QuickStart 486 Windows 3.11 Setup

**\$1699**

**Pentium 75MHz**

**100MHz Upgrade**

- Pentium 75MHz Processor
- 8MB 100% PC DRAM
- 8MB RAM
- 8.44MB Hard Drive
- 8.44MB Hard Drive & Speakers
- 8.44MB Internal Fax Modem
- 1.44MB Keyboard & Mouse
- 2 Serial & 1 Parallel Port
- 16 or 32MB Windows 3.11 Setup
- QuickStart 486 Windows 3.11 Setup

**\$1200**

**\$1549 \$1999 \$1699 \$1200**

Microconcept Network Products For Less !!

Microconcept Network Products For Less !!

Microconcept Network Products For Less !!

Microconcept Network Products For Less !!

Microconcept Network Products For Less !!

Microconcept Network Products For Less !!

Microconcept Network Products For Less !!

Microconcept Network Products For Less !!

Microconcept Network Products For Less !!

Microconcept Network Products For Less !!

Microconcept Network Products For Less !!

Microconcept Network Products For Less !!

Microconcept Network Products For Less !!

Microconcept Network Products For Less !!

Microconcept Network Products For Less !!

Microconcept Network Products For Less !!

Microconcept Network Products For Less !!

Microconcept Network Products For Less !!

Microconcept Network Products For Less !!

Microconcept Network Products For Less !!

Microconcept Network Products For Less !!

Microconcept Network Products For Less !!

Microconcept Network Products For Less !!

Microconcept Network Products For Less !!

Microconcept Network Products For Less !!

Microconcept Network Products For Less !!

Microconcept Network Products For Less !!

Microconcept Network Products For Less !!

Microconcept Network Products For Less !!

Microconcept Network Products For Less !!

Microconcept Network Products For Less !!

Microconcept Network Products For Less !!

Microconcept Network Products For Less !!

Microconcept Network Products For Less !!



Continued from page 20

around 200. Mile in the end of the year, with maximum products at 500,000."

In 1995, Intel's Pentium, the 150 386 Pentium processor is priced at US\$117, while the 486 Intel Pentium processor is priced at US\$117. Over a dozen PC manufacturers have followed Intel's lead in announcing new chips that they are launching the new chip into their computers.

Contact: Joanne Rappaport, Intel 408-765-7222

### 32D begins shipping Canadian built PowerPC systems

32D — 32D Systems Inc. has begun shipping its PowerPC workstations and servers based on PowerPC chips to Canadian universities, government and smaller corporate users.

The PowerPC systems, available in 32D's CompuServer product line, use PowerPC 601, 603, 604 and 605 processors on Motorola Corp. Alpha microprocessors.

The systems ship in its 32D Series C, C-1, C-2 and C-3 operating modes.

At 32D, the 32D Series C-1, C-2 and C-3 systems are sold in its products in Canada and are all of its 32D Series C-1, C-2 and C-3 systems. The 32D Series C-1, C-2 and C-3 systems are sold in its 32D Series C-1, C-2 and C-3 systems. The 32D Series C-1, C-2 and C-3 systems are sold in its 32D Series C-1, C-2 and C-3 systems.

Higher education is a major market for 32D. The 32D Series C-1, C-2 and C-3 systems are sold in its 32D Series C-1, C-2 and C-3 systems. The 32D Series C-1, C-2 and C-3 systems are sold in its 32D Series C-1, C-2 and C-3 systems.

Company officials believe the PowerPC technology is likely to be used in research and development applications where customers need powerful server processors. 32D also hopes for a few million dollars in sales of the system in 1995, growing to 10 million in 1996, says PowerPC's chief executive officer.

The PowerPC processors, said to power Mac OS X, IBM's System/390 machines and other systems from several other vendors, are the result of a joint development effort by Apple, IBM and Motorola.

32D, the 32D Series C-1, C-2 and C-3 systems are sold in its 32D Series C-1, C-2 and C-3 systems. The 32D Series C-1, C-2 and C-3 systems are sold in its 32D Series C-1, C-2 and C-3 systems.

Contact: 32D Systems Inc. 416-291-1111, ext. 2111, 32D Systems Inc. 416-291-1111, ext. 2111

### Seabla introduces Digital Video Disk

Seabla — Seabla Microsystems Inc. has introduced its new Digital Video Disk (DVD) technology in the 32D Series C-1, C-2 and C-3 systems.

Seabla's DVD technology is based on the 32D Series C-1, C-2 and C-3 systems. The 32D Series C-1, C-2 and C-3 systems are sold in its 32D Series C-1, C-2 and C-3 systems. The 32D Series C-1, C-2 and C-3 systems are sold in its 32D Series C-1, C-2 and C-3 systems.

Seabla's DVD technology is based on the 32D Series C-1, C-2 and C-3 systems. The 32D Series C-1, C-2 and C-3 systems are sold in its 32D Series C-1, C-2 and C-3 systems. The 32D Series C-1, C-2 and C-3 systems are sold in its 32D Series C-1, C-2 and C-3 systems.

32D Series C-1, C-2 and C-3 systems are sold in its 32D Series C-1, C-2 and C-3 systems. The 32D Series C-1, C-2 and C-3 systems are sold in its 32D Series C-1, C-2 and C-3 systems.

The new DVD technology is based on the 32D Series C-1, C-2 and C-3 systems. The 32D Series C-1, C-2 and C-3 systems are sold in its 32D Series C-1, C-2 and C-3 systems. The 32D Series C-1, C-2 and C-3 systems are sold in its 32D Series C-1, C-2 and C-3 systems.

On the other side, DVD offers a standard format for digital video. The 32D Series C-1, C-2 and C-3 systems are sold in its 32D Series C-1, C-2 and C-3 systems. The 32D Series C-1, C-2 and C-3 systems are sold in its 32D Series C-1, C-2 and C-3 systems.

32D Series C-1, C-2 and C-3 systems are sold in its 32D Series C-1, C-2 and C-3 systems. The 32D Series C-1, C-2 and C-3 systems are sold in its 32D Series C-1, C-2 and C-3 systems.

technology. The 32D Series C-1, C-2 and C-3 systems are sold in its 32D Series C-1, C-2 and C-3 systems. The 32D Series C-1, C-2 and C-3 systems are sold in its 32D Series C-1, C-2 and C-3 systems.

32D Series C-1, C-2 and C-3 systems are sold in its 32D Series C-1, C-2 and C-3 systems. The 32D Series C-1, C-2 and C-3 systems are sold in its 32D Series C-1, C-2 and C-3 systems. The 32D Series C-1, C-2 and C-3 systems are sold in its 32D Series C-1, C-2 and C-3 systems.

32D Series C-1, C-2 and C-3 systems are sold in its 32D Series C-1, C-2 and C-3 systems. The 32D Series C-1, C-2 and C-3 systems are sold in its 32D Series C-1, C-2 and C-3 systems. The 32D Series C-1, C-2 and C-3 systems are sold in its 32D Series C-1, C-2 and C-3 systems.

32D Series C-1, C-2 and C-3 systems are sold in its 32D Series C-1, C-2 and C-3 systems. The 32D Series C-1, C-2 and C-3 systems are sold in its 32D Series C-1, C-2 and C-3 systems.

32D Series C-1, C-2 and C-3 systems are sold in its 32D Series C-1, C-2 and C-3 systems. The 32D Series C-1, C-2 and C-3 systems are sold in its 32D Series C-1, C-2 and C-3 systems. The 32D Series C-1, C-2 and C-3 systems are sold in its 32D Series C-1, C-2 and C-3 systems.

32D Series C-1, C-2 and C-3 systems are sold in its 32D Series C-1, C-2 and C-3 systems. The 32D Series C-1, C-2 and C-3 systems are sold in its 32D Series C-1, C-2 and C-3 systems. The 32D Series C-1, C-2 and C-3 systems are sold in its 32D Series C-1, C-2 and C-3 systems.

### 1996 a slack year for World Wide Web growth, says IDC

50 — According to the World Wide Web will undergo a temporary slowdown in 1996, International Data Corp. (IDC) says in its forecast. The company expects growth in the next five to 10 years, predicting growth in the number of online users to more than 200 million. In 1996, IDC predicts growth in the number of online users to more than 200 million. In 1996, IDC predicts growth in the number of online users to more than 200 million.

Contacted on page 21

The new KX-P6500 Laser printer from Panasonic is the first laser printer of its kind that's designed to open Windows®. Windows 95® ready, this 600 dpi printer with image enhancement provides 1200 dpi equivalent real printing. The KX-P6500 proves that great things do come in small packages. But don't be fooled by its size. Small enough to hold on a shelf, while large enough to deliver high quality printing, makes the KX-P6500 perfect for the small or home office.

Not only is the use of this laser printer small, but so is its price. **Panasonic Laser Printers**

**Advanced Technology at a Beginner Price.**

Call 1-800-365-0636 for the dealer nearest you

A & S SOUND  
48 Locations  
For Western Locations Call  
1-800-365-0636

OFFICE DEPOT  
40 Locations  
For Western Locations Call  
1-800-365-0636

COMPONENTE  
40 Locations  
For Western Locations Call  
1-800-365-0636

ALL IN ONE SYSTEMS  
104 Locations  
For Western Locations Call  
1-800-365-0636

\*Model of Windows 95 are registered trademarks of Microsoft Corporation









## Photoshop/Photo-Paint 6.0

Continued from page 22

most visible component of the presentation. As mentioned above, the lighting effects are such a part of the Photoshop version 1 logo that users a back-to-the-void drawing board. However, Photo-Paint 6.0 — available on disk, separately and all — is a keeper. The fact that it is still on my hard disk and in regular use puts it on my "Recommended" list, although those weekly perfectionists — at least

better editors — might want to obtain the beta3 update that Good produced would be available by the "end of November."

I am waiting for two bagfuls before I consider using CoreDraw 8.0 as my serious work — and the review that will undoubtedly come from that experience. I suggest you wait too. Consider that the company is still releasing beta3s for its 3-D editor, the latest called 3.0B3, shipped in early November.

As for Photoshop, I tend to stick with version 2.5.1 on my 486-4MB/50-computer for a while (version 3.0 was just too bulky to fit

reliably in 4MB), but I found that it did not update the screen sometimes when running on Windows 95. I'm running 3.0 on my 386/486/16MB/50 and it is completely reliable, as long as I don't access EPC Graphics Designer and Textur Designer. (The beta patch shows my THORN scanner to work without problems.)

I don't know if there is a third to this story, but I feel like the Finalist for winning home. Good Photo/Paint, available, a world of potential and promise, but Photoshop is safe and productive. I'm back. Q

## Zaurus Means Business. Anytime, Anywhere.



### HANDWRITTEN NOTE TAKING



**SHARP**  
Keyboard-Enhanced Personal Digital Assistant  
**ZAURUS**  
**ZR-5000**

All the Conveniences of the Office away from the Office.

Zaurus makes data entry easy with both quick pen input and a spacious keyboard. Take advantage of such features as Handwritten Note Taking, Intelligent Word Processing, Integrated Time and Contact Management Software, and a handy Graphical User Interface.

What's more, you can also Send Faxes and Access E-mail and Online Services with the optional modem. Transfer files, schedules and documents by infrared connection or a real-time computer link with your office.

Wherever you go, whatever you do, Zaurus is there for you with full communications power.

Visit your Sharp dealer and live the Zaurus experience today!

**Distributed by:** A & L Electronic, #170-8771 Jaspoms Rd, Richmond, B.C. V6V 2L9  
Tel: (604) 279-0788

**Available at:** **386/486**  
URC Electronics  
(604) 622-9644

**Computer**  
(604) 879-8088

**Peripherals Included**  
(604) 602-8873

**Richmond**  
Microdata Office Automation  
(604) 278-0788

**Prince George**  
Spice-De Printers  
(604) 562-2414

## Pad renders rodents redundant

BY KENNEDY MAIZE



**YES —** Get out of the house, mouse! Get down the hall. Stick back! I've now using nature's best computer pointing device — my index finger.

My new Alps 486/660 keyboard replaces a small, mouse-shaped touch-sensitive pad between the arrow keys on the keyboard.

By using my finger, I can easily slide the mouse pointer around the screen. A double click, with no pressure required, launches applications. A double click and hold launches the desktop menu. Dragging and dragging is easy.

I took a while to get comfortable with the touch-sensitive mouse, but now I'd come back to a mouse. Pointing and clicking with a finger is much more comfortable and natural than the mouse and less taxing to the wrist.

According to Alps, the touch pad was "hand-dominant pointing," a form of "natural mouse clicking." When you touch the pad, the fingertip detects the electrical field in real time. The pad senses the point of contact, movement, pressure, the surface, and can precisely locate the fingertip, detecting very small movements.

The keyboard itself is also a nice package. It is conventional, but it is designed to solve the ergonomic problems of the desktop. It's a bit a curvy feel, and a couple of very good touches.

Alps includes software with the keyboard that allows the user to program the keys and change some of the attributes of the pointer and the touchpad.

One feature is the left portion of the touchpad, which can be programmed to be a conventional keyboard key. That's very useful for jogging the frequency and key where it is most easily available to the touch pad.

The keyboard has two other programable keys. One is switched with a Microsoft Windows key. In Windows 3.1, it can be programmed to bring up the task-switching window, a nice feature. The other key, bearing a symbol of a graphic icon, can be programmed to bring up a format application. The keys may also be programmed in Windows 95 and in good old DOS, through the Alps software.

Since I dictate most of my copy, the ergonomics of the keyboard are not particularly important to me. But I do like the overall look.

The keyboard also comes with a plastic repair rim right to repair themselves. The keyboard-mounted controls are quite sensibly designed, at about 118mm and a small slide lever under each computer hand rest. The keyboard has a lot of space, mostly, with two rows of replacement keys on the two rows.

My finger is on the controls and click the Alps. Q



### 3-D MULTIMEDIA

#### PENTIUM 75

- INTEL P75, Trium Chip Set
- 8MB RAM
- 1 GB Hard Drive
- 6X CD-ROM
- 25 Watt Speakers
- Diamond Edge 2MB 3D Video with full, irrevocable sound
- 14" SVGA, Non-Interlaced Monitor
- 10" Tower Case
- Enhanced Keyboard
- Microsoft CD's: Encarta '95, Money, Golf, Works, Games, etc...

**\$2099**

Add Windows '95 for \$95



### PREPARE YOURSELF FOR A BLAST OF

#### ULTIMATE GAME SYSTEM POWER

The new 3-D Multimedia Accelerator Card from Diamond now lets you immerse yourself in heart-pumping action and real-time 3-D movement - all at 100 Million Pixels-Per-Second!

The Graphics Card is the most important feature that determines your system's performance. That is why at CSC we use only Diamond Edge 3-D and Diamond Stealth - The Fastest 3-D Graphics card on the market. Stop by and see for yourself why our customers have been coming back for five or five years.

### 3-D MULTIMEDIA

#### PENTIUM 100

- INTEL P100, Trium Chip Set
- 16MB RAM
- 1.2 GB Hard Drive
- 6X CD-ROM
- 25 Watt Speakers
- Diamond Edge 2MB 3D Video with full wave 16 bit sound
- 14" SVGA, Non-Interlaced Monitor
- 10" Tower Case
- Enhanced Keyboard
- Microsoft CD's: Encarta '95, Money, Golf, Works, Games, etc...
- Windows 95 full version

**\$2699**

new with Pipeline cache



### 3-D MULTIMEDIA

#### PENTIUM 120

- INTEL P120, Trium Chip Set
- 32MB RAM
- 3.2 GB Hard Drive
- 6X CD-ROM
- 25 Watt Speakers
- Diamond Edge 2MB 3D Video with full irrevocable sound
- 14" SVGA, Non-Interlaced Monitor
- 10" Tower Case
- Enhanced Keyboard
- Microsoft CD's: Encarta '95, Money, Golf, Works, Games, etc...
- Windows 95 full version

**\$2799**

new with Pipeline cache



Our 3D graphics package allows you to play video games and more in 3D

### STARTER

#### PENTIUM 100

- INTEL P100, Trium Chip Set
- 8MB RAM
- 1 GB Hard Drive
- 16 bit sound card
- 6X CD-ROM
- 1 MB PCI Video Card
- 14" SVGA Non-Interlaced Monitor
- 10" Tower Case
- Enhanced 101 Keyboard

**\$1869**

**2D  
Systems  
Upgrade to  
Win '95 for \$99**

### DIAMOND

### MULTIMEDIA

#### PENTIUM 100

- INTEL P100, Trium Chip Set
- 16MB EDO RAM
- Enhanced 1.2 GB IDE Hard Drive
- Diamond Stealth 2MB Video
- 6X CD-ROM
- Diamond Master 16
- 25 Watt Speakers
- 14" SVGA Non-Interlaced Monitor
- 10" Tower Case
- Enhanced 101 Keyboard

**\$2899**

new with Pipeline cache

**TEAC  
6X CD-ROM  
\$289**

**Hot!**

**Call For Our  
Low Monthly  
Payments**

All Pentium workstations come with:  
• 1MB Flash Bios  
• Upgradeable to Pipeline cache  
• CPU Upgradeable to 200MHz

**Novell  
Perfect Office  
\$159  
with any system**

**Microsoft Office  
Professional  
for Win/95  
\$389**

**CSC**  
COMPUTERS

385 Lynn Avenue  
North Vancouver, B.C.  
V7J 2C4

TEL

FAX

REPAIR

Open 10 AM to 6 PM Monday to Friday  
Open Saturday 10 AM to 5 PM

**Call: 980-6373 or 420-1655  
Fax: 980-2077 or 941-8855**

CHESN  
C-0106

July 1995  
C-0106

# FRONTIER COMPUTER 739-8060

## INTEL PENTIUM 100

Intel Pentium 100 CPU

285 cache, 20 Pin, 140nm

805 BGA, 100 Pin, 20 Pin

Support 100 word data, 140nm

PO (Intel) 100 Pin, 140nm

PO (Intel) 100 Pin, 140nm

**\$1,598** Internet Ready

1 (Intel) Pentium 100 CPU

285 cache, 20 Pin, 140nm

805 BGA, 100 Pin, 20 Pin

Support 100 word data, 140nm

PO (Intel) 100 Pin, 140nm

PO (Intel) 100 Pin, 140nm

## FEBRUARY SPECIAL!

GoldCam Desktop Camera	\$147	WFO 1.6GB/1.6GB Mode 4	\$299/1.6
IBM 100MB Zip1 FDR	\$250/500	Control 20 & 4 Pin Fan	\$120
Perceptics Data CD-ROM	\$65/500	SupraSpeed 28.8 Pin PnP	\$290
Quantum FS 1.2GB Mode 4	\$340	WinFax Office Pro V1.2 for Win95	\$370
Seagate 1.6GB/1.6GB Mode 4	\$300	C&E Course and Software	C&E

## FRONTIER'S UPGRADABLE SYSTEM

Package 1 (PCI)	Package 2 (PCI)	Package 3 (PCI)	Package 4
DX4-100 \$1340 Scale-100 \$1400	DX4-100 \$1604 Scale-100 \$1604	DX4-100 \$2180 Scale-100 \$2244	DX4-100 \$2432 Scale-100 \$2496
P-75 Turbo \$1520 P-100 Turbo \$1590 P-120 Turbo \$1614 P-130 Turbo \$1684 P-150 Turbo \$1708 P-160 Turbo \$1764	P-75 Turbo \$1527 P-100 Turbo \$1597 P-120 Turbo \$1621 P-130 Turbo \$1691 P-150 Turbo \$1715 P-160 Turbo \$1771	P-75 Turbo \$2170 P-100 Turbo \$2240 P-120 Turbo \$2264 P-130 Turbo \$2334 P-150 Turbo \$2358 P-160 Turbo \$2414	P-75 Turbo \$2412 P-100 Turbo \$2482 P-120 Turbo \$2506 P-130 Turbo \$2576 P-150 Turbo \$2600 P-160 Turbo \$2656
Intel 100 CPU Intel 100 CPU Intel 100 CPU Intel 100 CPU Intel 100 CPU Intel 100 CPU	Intel 100 CPU Intel 100 CPU Intel 100 CPU Intel 100 CPU Intel 100 CPU Intel 100 CPU	Intel 100 CPU Intel 100 CPU Intel 100 CPU Intel 100 CPU Intel 100 CPU Intel 100 CPU	Intel 100 CPU Intel 100 CPU Intel 100 CPU Intel 100 CPU Intel 100 CPU Intel 100 CPU
Intel 100 CPU Intel 100 CPU Intel 100 CPU Intel 100 CPU Intel 100 CPU Intel 100 CPU	Intel 100 CPU Intel 100 CPU Intel 100 CPU Intel 100 CPU Intel 100 CPU Intel 100 CPU	Intel 100 CPU Intel 100 CPU Intel 100 CPU Intel 100 CPU Intel 100 CPU Intel 100 CPU	Intel 100 CPU Intel 100 CPU Intel 100 CPU Intel 100 CPU Intel 100 CPU Intel 100 CPU
Intel 100 CPU Intel 100 CPU Intel 100 CPU Intel 100 CPU Intel 100 CPU Intel 100 CPU	Intel 100 CPU Intel 100 CPU Intel 100 CPU Intel 100 CPU Intel 100 CPU Intel 100 CPU	Intel 100 CPU Intel 100 CPU Intel 100 CPU Intel 100 CPU Intel 100 CPU Intel 100 CPU	Intel 100 CPU Intel 100 CPU Intel 100 CPU Intel 100 CPU Intel 100 CPU Intel 100 CPU

Free one month Internet access with modem purchase!

Intel

Intel

Intel

Intel

Intel

Intel

Intel

Intel

Intel

Intel

Intel

Intel

Intel

Intel

Intel

Intel

Intel

Intel

Intel

Intel

Intel

Intel

Intel

Intel

Intel

Intel

Intel

Intel

Intel

Intel

Intel

Intel

Intel

Intel

Intel

Intel

Intel

Intel

Intel

Intel

Intel

Intel

Intel

Intel

Intel

Intel

Intel

Intel

Intel

Intel

Intel

Intel

## FRONTIER'S

### FAVORITE OPTIONS:

Intel 100 CPU

Intel 100 CPU

Intel 100 CPU

Intel 100 CPU

Intel 100 CPU

Intel 100 CPU

Intel 100 CPU

Intel 100 CPU

Intel 100 CPU

Intel 100 CPU

Intel 100 CPU

Intel 100 CPU

Intel 100 CPU

Intel 100 CPU

Intel 100 CPU

Intel 100 CPU

Intel 100 CPU

Intel 100 CPU

Intel 100 CPU

Intel 100 CPU

Intel 100 CPU

Intel 100 CPU

Intel 100 CPU

Intel 100 CPU

Intel 100 CPU

Intel 100 CPU

Intel 100 CPU

Intel 100 CPU

Intel 100 CPU

Intel 100 CPU

Intel 100 CPU

Intel 100 CPU

Intel 100 CPU

Intel 100 CPU

Intel 100 CPU

Intel 100 CPU

Intel 100 CPU

Intel 100 CPU

Intel 100 CPU

Intel 100 CPU

Intel 100 CPU

Intel 100 CPU

Intel 100 CPU

Intel 100 CPU

Intel 100 CPU

Intel 100 CPU

Intel 100 CPU

Intel 100 CPU

Intel 100 CPU

Intel 100 CPU

Intel 100 CPU

Intel 100 CPU

Intel 100 CPU

Intel 100 CPU

Intel 100 CPU

Intel 100 CPU

Intel 100 CPU

Intel 100 CPU

Intel 100 CPU

Intel 100 CPU

Intel 100 CPU

Intel 100 CPU

Intel 100 CPU

Intel 100 CPU

Intel 100 CPU

Intel 100 CPU

Intel 100 CPU

Intel 100 CPU

Intel 100 CPU

Intel 100 CPU

Intel 100 CPU

Intel 100 CPU

Intel 100 CPU

Intel 100 CPU

Intel 100 CPU

Intel 100 CPU

Intel 100 CPU

Intel 100 CPU

Intel 100 CPU

Intel 100 CPU

Intel 100 CPU

Intel 100 CPU

Intel 100 CPU

Intel 100 CPU

Intel 100 CPU

Intel 100 CPU

Intel 100 CPU

Intel 100 CPU

Intel 100 CPU

Intel 100 CPU

Intel 100 CPU

Intel 100 CPU

Intel 100 CPU

Intel 100 CPU

Intel 100 CPU

Intel 100 CPU

Intel 100 CPU

Intel 100 CPU

Intel 100 CPU

Intel 100 CPU

Intel 100 CPU

Intel 100 CPU

Intel 100 CPU

Intel 100 CPU

Intel 100 CPU

Intel 100 CPU

Intel 100 CPU

Intel 100 CPU

Intel 100 CPU

Intel 100 CPU

Intel 100 CPU

Intel 100 CPU

Intel 100 CPU

Intel 100 CPU

Intel 100 CPU

Intel 100 CPU

Intel 100 CPU

Intel 100 CPU

Intel 100 CPU

Intel 100 CPU

Intel 100 CPU

Intel 100 CPU

Intel 100 CPU

Intel 100 CPU

Intel 100 CPU

Intel 100 CPU

Intel 100 CPU

Intel 100 CPU

Intel 100 CPU

Intel 100 CPU

Intel 100 CPU

Intel 100 CPU

Intel 100 CPU

Intel 100 CPU

Intel 100 CPU

Intel 100 CPU

Intel 100 CPU

Intel 100 CPU

Intel 100 CPU

Intel 100 CPU

Intel 100 CPU

Intel 100 CPU

Intel 100 CPU

Intel 100 CPU

Intel 100 CPU

Intel 100 CPU

Intel 100 CPU

Intel 100 CPU

Intel 100 CPU

Intel 100 CPU

Intel 100 CPU

Intel 100 CPU

Intel 100 CPU

Intel 100 CPU

Intel 100 CPU

Intel 100 CPU

Intel 100 CPU

Intel 100 CPU

Intel 100 CPU

Intel 100 CPU

Intel 100 CPU

Intel 100 CPU

Intel 100 CPU

Intel 100 CPU

Intel 100 CPU

Intel 100 CPU

Intel 100 CPU

Intel 100 CPU

Intel 100 CPU

Intel 100 CPU

Intel 100 CPU

Intel 100 CPU

Intel 100 CPU

Intel 100 CPU

Intel 100 CPU

Intel 100 CPU

Intel 100 CPU

Intel 100 CPU

Intel 100 CPU

Intel 100 CPU

Intel 100 CPU

Intel 100 CPU

Intel 100 CPU

Intel 100 CPU

Intel 100 CPU

# FRONET INTERNET WWW.Fronet.com

## Vancouver's First Computer Dealer/Internet Provider

Offers you the affordability of a major provider with the computer know-how of a dealer  
Here are some of the advantages of Fronet:

### Full Internet Access

- Low price of \$18.95 per month
- Unlimited access
- No setup fee
- Free technical support
- PPP Dial up, E-mail, WWW Access, News Group
- Many other features like:



### Fronet Classifieds

You can use Fronet's classified advertising section to meet a friend, or to buy and sell.

- Easy to add, update and delete
- Advertisements from all over the world accepted
- Powerful search engine to find what you want
- Responses go directly to your E-mail



### On-line Computer Store

- Once you are on the net visit Fronet's on-line computer store.
- Over 20,000 computer hardware and software products available
  - Real-time quotation system for computer purchase
  - Up-to-minute low price listed on new and hot products
  - Order computer products right from your PC
  - Chinese Service



### Fronet Corporate Services

Specializing in creating catalogue-based web sites for small and large businesses

- Competitive Webspace price for home page
- Easy to add, update and delete your site
- Powerful search engine to find businesses, products or services



Fronet is a Full PPP Internet access provider

**Call Today Or Visit Our Broadway Burrard Location :** Sales: 739-8060  
Tech Support: 739-8007  
1784 West Broadway



anything less than a Pentium, though. We tested Internet Assistant 2.0 on a 486-50 with 16MB of RAM, and found it performance-wise acceptable.

Internet Assistant is uniquely integrated into the Windows 95 environment. When you install it, a new option becomes available when you right-click on an HTML file to address to the word "Open" command, which had "read" when this command is invoked. The file option then up in Word, which opens the file and displays it in full HTMLVIEW mode. It brings the text style into GDI and PDFs, plus adds support for a number of enhancements specific to Microsoft Internet Explorer's fonts, colors, and several other extended tags. Naturally, you have access to the powerful suite of editing and spell-checking tools in Word. It will.

Unlike the first version of Internet Assistant, the 2.0 release can also switch to full HTMLVIEW mode, to view and edit "raw" HTML.

One other interesting feature of Internet Assistant is its ability to download a page directly off the Internet and open it for editing. In all, Internet Assistant is a classic example of the way Microsoft likes to take many of its features, the company comes out with a new version and then works to upgrade a classic, far product's right up there with upgrades. And that's exactly the charm of its integration. We at PC World can't say it very far from as it has done with Internet Explorer. What's more, Internet Assistant's special offer on MS Money and other products.

Internet Assistant is a must as if you're a Webmaster. Windows 95 are delivered as a HTMLVIEW Webpage authoring environment.

#### HTMLPro



This Windows-based HTML editor takes a considerably different look than the above-mentioned Web Internet Software. It features a focus on the needs of professional page designers and has come up with a product that makes off some of the best professional capabilities such as the ability to handle forms, tables, and Netscape and HTML 2.0 tags. Check out the product at the company's Web site: [www.htmlpro.com](http://www.htmlpro.com).

#### Phase 2: Other media on the Net

Not to worry at all, let's not forget that the Internet is not only a wide variety of other media, it's also a place to find and publish "audio-visual" content via Web browser. Many applications to "plug out" content the capabilities of Web browser to

support animation and video audio speech MIDI, 3D graphics, etc. HTML, before or just about anything. The "audio-visual" content of media are most successful than others, due to the above-mentioned bandwidth of the Net.

Here are the big players, what they do and the best way to create content for each:

#### Animation

For Netscape, the best animation/interactive media solution is ShockWave, which uses Macromedia Director, a \$145 (the price)

price is about \$1000) technology tool for Windows or Mac. Support for HTML tags is built into Netscape's Internet Explorer 2.0. Netscape and other browsers require a plug-in to play AVI or QuickTime files, although Apple has announced its intention to provide a QuickTime plug-in for Netscape 2.0.

Although the Internet bandwidth of a modern-connected Internet user makes following video, important, small "plug-in" files can be delivered using today's technology. The two leading systems are Xing FlashMedia and PDC Live. Both are available

for Windows, the former, a cheaper app, offers from a cheap interface, and the latter, available as a Macintosh help app, for a Netscape plug-in to view pictures online.

A conferencing system called CUSeeMe, developed at Cornell University, provides much slower businesses and peers. It's likely to be one of the first of these products, but nevertheless has generated a considerable following, partially due to the fact that it is available for both Windows and Macintosh computers, but previously known in clients with its

## No matter what you choose,

No matter which operating system you choose, LANtastic is the best choice for networking small and mid-size businesses. Because LANtastic is the only network operating system that offers a solution across DOS, Windows and Mac operating systems, that's both

flexible and easy to use.

Whether one of the many reasons why LANtastic is so successful is the PC, Macintosh, Release Choice, and more. LANtastic is the only network operating system and

created an easy-to-install, easy-to-use line of networking products for any operating system you choose, including Windows 95. Our newest release, LANtastic for Windows 95, lets you connect Windows 95-based PCs to all of your existing PCs on your LANtastic

the same time new technology is adopted.

If you'd like more information, call us at 1-800-444-5326. We'll send you a brochure on our complete family of products, as well as a free copy of "Small Business Networking in the Era of Windows 95." It details how

## we're the network of choice.

LANtastic is the best Windows 95 migration path for small and mid-sized businesses, letting you upgrade to Windows 95 at your own pace. So your existing investments are protected at

with LANtastic, you can have powerful networking no matter what platform you choose. Which is exactly why we're the small business network of choice.

**LANtastic**  
Powerful simple networking.

Small Business  
1-800-444-5326  
© 1995 LANtastic, Inc. All rights reserved.  
LANtastic is a registered trademark of LANtastic, Inc.



LANtastic is a registered trademark of LANtastic, Inc. All rights reserved. LANtastic is a registered trademark of LANtastic, Inc. All rights reserved.



Introducing the

family of products.

# My Internet™

## PACKAGES INCLUDE:

- Full Flat Rate Internet Access • No Hourly charges
- One time start-up fee • First month of Internet Access • Free connection software

## VALUE PACK SERIES ALSO INCLUDE:

- THE INTERNET FOR DUMMIES TEXT BOOK • Limited Edition Mousepad

## ACCESS 4 KIDS INCLUDES:

- Net Nanny - Internet Protection For Your Children

the original  
all in one

the same thing  
but for Win.95



The Perfect  
Christmas Gift  
Available at:

LONDON  
DRUGS

DOPPLER

FUTURE SHOP  
MULTIMEDIA SPECIALISTS

ab sound

CAMPUS  
MULTIMEDIA

book  
Jarchosse

# OUR SYSTEM CONNECTS YOUR LOCAL AREA NETWORK TO THE WORLD WITH NO LONG DISTANCE CHARGES!



## INTRODUCING THE COMPUCON INTERNET GATEWAY



With the Compucon Internet Gateway in your office, all workstations will be able to communicate using email within the LAN as well as with other computers all over the world at the same time at local call rates via a single telephone connection to an Internet Service Provider.

Your company can also access business information in the Internet world from any workstation. Compucon has designed a series of network communication systems to enhance the efficiency of your office. Contact your Compucon dealer or our office today for a free consultation.

**COMPUCON**  
COMPUTER SERIES  
DISTRIBUTED BY: FASTECH COMPUTER LTD.

### BRITISH COLUMBIA

387 - 13711 McLeod Road,  
Richmond, BC V6V 2G9  
Tel: (604) 278-9688 • Fax: (604) 278-9387  
Internet@compucon.com

### ALBERTA

Unit 10, 3030 - 29th Street NE,  
Calgary, Alberta T2C 1G3  
Tel: (403) 293-3333 • Fax: (403) 293-3333  
Internet@compucon.com

**DON'T WAIT ANY LONGER.**

**INSTALL A COMPUCON INTERNET GATEWAY AND LINK YOUR ENTIRE OFFICE TO THE WORLD.**

## PUBLISHING

### Build your own Web site

*Continued from page 30*

operating system with long filenames requires a good IDE or FTP program can handle long filenames without any manual fiddling on your part. You see your files on one disk and the remote directory list, your FTP's side on the other. You can "get" or "put" files with ease — as long as you have the password to the site. This way, other people can't delete or change the files at your site without your permission.

Once posted to the site, your content should also access your pages simply by specifying their URL, just as you would access a file. If you don't like your site being loaded like a sub-directory on your Internet provider's drive (e.g., <http://www.your.providername.com/yourdomain/yourdomainpage.html>) you can pay to register your own domain name with an organization called ICANN. From your ISP if they can do the necessary and handle the registration for you.

For example, we've registered The Computer Experts Web site URL as [www.computerexperts.com](http://www.computerexperts.com) but we're also on our way to registering the name "computerexperts.com". Many people expect the "www" prefix. Naturally, once we've registered the URL, we can't also have it with the same name.

Now also that most versions of Netscape, Internet Explorer and some other Web browsers don't read the regularly and badly say "http://" code that is commonly quoted as the first part of a Web address.

## Conclusion: Now that you're a global presence

We recommend that you focus on creating a limited presence that emphasizes content over looks. People don't want deluged with the information highway, they want to be able to find what they're looking for. Update your site frequently if it's Web. New data will keep Web surfers coming back again and again.

If your staff or doesn't include experts in design or graphic content having a professional help you put together a Web site that works. We think that having a presence on the World Wide Web will soon be as important as having a fax number or a telephone number — getting more to functioning at the level of the world of the working, the Internet, and Web, even you need to get your site as good, or to many cases, better than the commercial ones.

Henry Chan Q

**COMPUCON™**

**QUALITY COMPUCON™ PRODUCTS AVAILABLE AT:**

**BRANDON**  
CENTRAL COMPUTER SERVICE  
TEL: (504) 884-4040  
Fax: (504) 884-8076

**BALCON PHYSICAL SYSTEMS INC.**  
TEL: (800) 420-0848  
Fax: (800) 420-0827

**BELMONT COMPUTER SERVICES**  
TEL: (800) 889-0800  
Fax: (800) 487-5157

**BURNS KEY COMPUTER CO.**  
TEL: (800) 884-4040  
Fax: (800) 884-8076

**BYRONVILLE DATAWORKS LTD.**  
TEL: (800) 758-4791  
Fax: (800) 758-4791

**CHILMARK**  
ONE CHILMARK WAY CHILMARK, MA  
TEL: (800) 456-1262  
Fax: (800) 456-1262

**COMPUTER**  
MOUNTAIN COMPUTER SERVICES  
TEL: (800) 987-0175  
Fax: (800) 987-0174

**COMPUTER**  
627 LAKE COMPUTER  
TEL: (800) 887-1140  
Fax: (800) 887-1140

**COMPUTER**  
COMPUTER SYSTEMS  
TEL: (800) 887-1140  
Fax: (800) 887-1140

**COMPUTER**  
NEWARK COMPUTER SERVICES  
TEL: (800) 324-4874  
Fax: (800) 324-4874

**COMPUTER**  
CREATIVE SYSTEMS  
TEL: (800) 887-1140  
Fax: (800) 887-1140

**COMPUTER**  
TECHNICAL  
TEL: (800) 758-4791  
Fax: (800) 758-4791

**COMPUTER**  
MASSACHUSETTS  
TEL: (800) 884-4040  
Fax: (800) 884-8076

**COMPUTER**  
NEWARK COMPUTER LTD.  
TEL: (800) 324-4874  
Fax: (800) 324-4874



# WYSIWYG Web publishing from Adobe

BY JIMMY WINTERBOYTON

Product: Adobe PageMill 1.0  
 Vendor: Adobe Systems Inc.  
 Price: US\$99

Every month, after we've passed all of our blood, sweat and tears time-published The Computer Paper, we even all agree with our online edition.

Publishing online can be a tedious task — it means dealing with HTML coding and often requires the use of a graphics helper application to get the desired results. Every month I find myself having endless moments of code, but not without the help of at least a dozen other applications to get the job done.



Adobe PageMill 1.0 has been the much-anticipated answer to the bulk of my problems. This newly released Web-page authoring software has integrated, into one package, a majority of the features that helped you get via PageMill's WYSIWYG (What You See Is What You Get) interface. Adobe's development team has also added publishing programs in the late 1990s, allowing the ability to edit and view your pages as they would appear once uploaded on the Web. PageMill simulates how a page looks when viewed on the Web by working between edit and preview modes.

**PageMill simulates how a page looks when viewed on the Web by working between edit and preview modes**

You don't need to bother with manual HTML coding — PageMill offers style sheets and a page template window, which you use when the desired HTML function. Other useful time-saving features offer drag-and-drop functions for images and text, easy manipulation of graphics including conversion from PICT to GIF formats, resizing, transparency and interlacing, and options to export items and image maps.

PageMill 1.0 is the first version of what the site will become a more sophisticated program. Currently it supports only HTML Version 2. Those who are accustomed to more elegant formatting, such as tables, will be dis-

appointed that more sophisticated features such as this were not included. They were likely omitted because PageMill has been targeted at beginners and those who don't require complicated pages. For example,

because I'm dealing with very tight hourly billing, I didn't find this a major deficiency. However, PageMill has provided a function to add new HTML codes if necessary. For more

## EVERY ERA HAS ITS OWN PIONEERS.



**P300-300K**  
300-Disk AutoCharger



**P350-350K**  
11-Disk AutoCharger



**P400-400K**  
6-Disk AutoCharger



**P4120-4120K**  
4 x 120-Disk Drive



**P5100-5100K**  
Quadtrack Writer

These Pioneers are bold, innovative and ahead of their time. In this spirit we have designed and built a comprehensive family of products to address all aspects of your CD-ROM handling requirements. From single Speed 100/90/60 Drives to CD Writers and CD AutoChargers.

For more information please call our Industrial Products Division, Pioneer Electronics of Canada, Inc. at 1-800-850-1700, access our Internet address at 1026/143801.compuware.com or contact one of our knowledgeable distributors listed below.

Leading edge technology from

**PIONEER**

**B** BROTHER  
1-800-468-6311

**DMV**  
1-800-285-7711

**Supercom**  
1-800-487-4550

**Supercom**  
1-800-487-4550

**IX**  
1-800-360-9476

ing a more sophisticated look for your pages. On the other hand, as I've mentioned in reviewing HTML tags as I mention a page I found it more frustrating that PageMill didn't incorporate a feature to view the code. In order to still be able to peek, you must load the file into a browser. Why bother when you can have the code laid out accordingly. Although PageMill promises itself as a desktop tool for creating Web pages without knowing HTML, a user must still have some knowledge of how programs interact with the use of HTML, coding on the side.

Editing in PageMill is perhaps the most difficult task. You will have to deal with about nine different windows, depending on how and when you want your content and destination pages to be linked. Once mastered, however, they are simple and quick. Linking with one page, by creating "anchors," as mentioned in page 80, proved to be a real headache. This window takes an dragging the anchor onto a different location on the page—only PageMill doesn't support a scrolling drag function. This makes it nearly impos-

sible to link, using this method, from the bottom of a page, for example, to the top of the same page.

Texted errors are noticeable as new software, and PageMill is no exception. Although errors weren't too frequent, anything that takes extra time is a hassle. I discovered one of the more annoying bugs after updating my pages to the new PageMill and discovered spaces between some words. And occasionally PageMill didn't preserve a link I had specified, only to do so after I reentered the link and saved again.

A great feature, and one of my favorites, is a preview. PageMill's "preview" feature, which works much like a library or QuickPress or PageMaker. This allows you to copy and paste from a text editor, import or link to a quick and easy implementation into your pages while maintaining correct pictures and links. Adobe has also included a number of keyboard shortcuts to make the editing process in PageMill easier to learn.

Although PageMill makes a link to support for newer HTML, formatting features, and contains some additional features, it will make HTML coding quicker and easier. PageMill can be used by a beginner to create and produce a Web page or by a professional Webmaster to quickly create new pages and sites and design for existing Web sites—without much effort.

## Building the power.

### Flexibility...

...and so is the new **Datam X** Microsystem. In addition to replication and value, the **Datam X** now combines real affordability with innovative new features that make it the most powerful microsystem in its class. To start, you can choose the processor you want - from extremely fast (486DX2/66MHz) to blinding fast (Pentium® 133MHz).

### Upgradeability...

Every **Datam X** microsystem is plug and play compliant, comes equipped with PCI Local Bus graphics, voice fax modem, and is pre-loaded with Windows® 95. Optional CD-ROM and other PCI additions are also available to tailor your applications needs.

### Compatibility...

Best of all, the **Datam X** is available in several different platforms to accommodate every working environment. The new **Datam X** Microsystem will give you a whole new way to think about computing for your home or business.



**1-800-665-1858**  
LG 1000 3000 5000 6000  
Pentium® 95 C 100 120  
Fax: 908-375-4601  
Fax: 908-375-4601

Datam is a trademark of LG Logic Group Inc.  
Pentium is a registered trademark of Intel Corp.  
Windows is a registered trademark of Microsoft Corp.







## MS Publisher 3.0

Continued from page 36

information on cloning the right paper, printing at a customer's printer, blanking, plot and other info listed in the book. The Publisher Companion, located with Publisher 3.0, — you can print a proof and view desktop options and then use Publisher's "Outside Print Driver" and "Print to Outside Printer" commands to output your files in black and white graphics, spot colors (including support for printers with resolution greater than 1200 dots per inch) or full-color proofs on a color printer.

An "Options" button at the top center allows you to choose the spot color you want, set black to overprint, or print on black text to overprint only if it falls under 15 points, in any color point that you select. You set on any other publishing program.

In addition to the most printer support available in Windows 95 programs, Publisher includes special line printers, printer drivers that can print your documents at a 300 dpi to print on a dot and add to your local graphics server buses for high-quality output.

Internet options are provided, including "Postscript language (or PDF)" and EPS and Postscript files are in other Windows

programs or for printing into popular Microsoft applications.

The latest includes options professional users come to demand from professional desktop publishing. Publisher 3.0 includes options to automatically "tag" "tag" and "tag" options, variable text, frequency (this allows you to enter the "frequency" data this program uses to publish) and printed and includes options for linking a color-matching system, including the color-matching system, or negative (blue-contrast) images, plus a "Print Troubleshooting" specialty designed to help other PostScript printing problems.

There's also an option to print an "Outside Printing Checklist," which is likely

to save you from publishing errors. It lists a few pieces of material that can be added (like graphics or other color options).



"Print Proof" has never been closer.

# NEWTECH

## Plus Computers Ltd.

## Spring Special

From 1st March to 31st March  
 10% discount on all hardware  
 15% discount on all software  
 10% discount on all services  
 10% discount on all accessories  
 10% discount on all peripherals



## Services:

## System Consultation

On-site service

Software consultation

Hardware repair

Trouble shooting

Software installation

Hardware installation

Maintenance contracts

## Upgrades

Limited quantities.

Prices subject to change without notice.

6+ years in business.

Subject to manufacturer's warranty.

Surcharges for credit cards.

Deposit \$ \_\_\_\_\_

Order by Credit Card:

☐ Visa ☐ Mastercard

Card Number: \_\_\_\_\_

Expiry Date: \_\_\_\_\_

Signature: \_\_\_\_\_

6996 Victoria Drive, Vancouver, B.C.

V5P 3X9

Tel: 327-0883 Fax: 327-0881

Shopping Hours

Mon-Sat. 10:00-6:00pm

Sundays &amp; Holidays - Closed

## PC/XT/AT/PS/486 Systems

Q1000 Pentium 100MHz	\$920
Q1000 Pentium 100MHz	\$1,040
Q1000 Pentium 100MHz	\$1,040
Q1000 Pentium 100MHz	\$1,040
Q1000 Pentium 100MHz	\$1,040
Q1000 Pentium 100MHz	\$1,040
Q1000 Pentium 100MHz	\$1,040
Q1000 Pentium 100MHz	\$1,040
Q1000 Pentium 100MHz	\$1,040
Q1000 Pentium 100MHz	\$1,040

## All Models Includes:

Case	3500 (free)
Memory	4MB
Case	3500 (free)
3500 (free)	3500 (free)
3500 (free)	3500 (free)
3500 (free)	3500 (free)
3500 (free)	3500 (free)
3500 (free)	3500 (free)
3500 (free)	3500 (free)
3500 (free)	3500 (free)

## Upgrades:

Q1 100MHz	\$100
Q1 100MHz	\$100
Q1 100MHz	\$100
Q1 100MHz	\$100
Q1 100MHz	\$100
Q1 100MHz	\$100
Q1 100MHz	\$100
Q1 100MHz	\$100
Q1 100MHz	\$100
Q1 100MHz	\$100

## CPU:

Q1000 Pentium 100MHz	\$920
Q1000 Pentium 100MHz	\$1,040
Q1000 Pentium 100MHz	\$1,040
Q1000 Pentium 100MHz	\$1,040
Q1000 Pentium 100MHz	\$1,040
Q1000 Pentium 100MHz	\$1,040
Q1000 Pentium 100MHz	\$1,040
Q1000 Pentium 100MHz	\$1,040
Q1000 Pentium 100MHz	\$1,040
Q1000 Pentium 100MHz	\$1,040

## Monitors:

Q1000 Pentium 100MHz	\$920
Q1000 Pentium 100MHz	\$1,040
Q1000 Pentium 100MHz	\$1,040
Q1000 Pentium 100MHz	\$1,040
Q1000 Pentium 100MHz	\$1,040
Q1000 Pentium 100MHz	\$1,040
Q1000 Pentium 100MHz	\$1,040
Q1000 Pentium 100MHz	\$1,040
Q1000 Pentium 100MHz	\$1,040
Q1000 Pentium 100MHz	\$1,040

## Motherboards/PSUs (CPU):

Q1000 Pentium 100MHz	\$920
Q1000 Pentium 100MHz	\$1,040
Q1000 Pentium 100MHz	\$1,040
Q1000 Pentium 100MHz	\$1,040
Q1000 Pentium 100MHz	\$1,040

## Name:

## Address:

## City:

## Home Tel:

## Fax:

## Q1000 Pentium 100MHz

Q1000 Pentium 100MHz	\$920
Q1000 Pentium 100MHz	\$1,040
Q1000 Pentium 100MHz	\$1,040
Q1000 Pentium 100MHz	\$1,040
Q1000 Pentium 100MHz	\$1,040
Q1000 Pentium 100MHz	\$1,040
Q1000 Pentium 100MHz	\$1,040
Q1000 Pentium 100MHz	\$1,040
Q1000 Pentium 100MHz	\$1,040
Q1000 Pentium 100MHz	\$1,040

## CD-ROM:

Q1000 Pentium 100MHz	\$920
Q1000 Pentium 100MHz	\$1,040
Q1000 Pentium 100MHz	\$1,040
Q1000 Pentium 100MHz	\$1,040
Q1000 Pentium 100MHz	\$1,040
Q1000 Pentium 100MHz	\$1,040
Q1000 Pentium 100MHz	\$1,040
Q1000 Pentium 100MHz	\$1,040
Q1000 Pentium 100MHz	\$1,040
Q1000 Pentium 100MHz	\$1,040

## Hard Drives:

Q1000 Pentium 100MHz	\$920
Q1000 Pentium 100MHz	\$1,040
Q1000 Pentium 100MHz	\$1,040
Q1000 Pentium 100MHz	\$1,040
Q1000 Pentium 100MHz	\$1,040
Q1000 Pentium 100MHz	\$1,040
Q1000 Pentium 100MHz	\$1,040
Q1000 Pentium 100MHz	\$1,040
Q1000 Pentium 100MHz	\$1,040
Q1000 Pentium 100MHz	\$1,040

## Floppy Drives:

Q1000 Pentium 100MHz	\$920
Q1000 Pentium 100MHz	\$1,040

## Tape Drives:

Q1000 Pentium 100MHz	\$920
Q1000 Pentium 100MHz	\$1,040

## Keyboards:

Q1000 Pentium 100MHz	\$920
Q1000 Pentium 100MHz	\$1,040
Q1000 Pentium 100MHz	\$1,040
Q1000 Pentium 100MHz	\$1,040
Q1000 Pentium 100MHz	\$1,040

## FAX / Modems:

Q1000 Pentium 100MHz	\$920
Q1000 Pentium 100MHz	\$1,040
Q1000 Pentium 100MHz	\$1,040
Q1000 Pentium 100MHz	\$1,040
Q1000 Pentium 100MHz	\$1,040
Q1000 Pentium 100MHz	\$1,040
Q1000 Pentium 100MHz	\$1,040
Q1000 Pentium 100MHz	\$1,040
Q1000 Pentium 100MHz	\$1,040
Q1000 Pentium 100MHz	\$1,040

## General LED &amp; Power supply:

Q1000 Pentium 100MHz	\$920
Q1000 Pentium 100MHz	\$1,040
Q1000 Pentium 100MHz	\$1,040
Q1000 Pentium 100MHz	\$1,040
Q1000 Pentium 100MHz	\$1,040
Q1000 Pentium 100MHz	\$1,040
Q1000 Pentium 100MHz	\$1,040
Q1000 Pentium 100MHz	\$1,040
Q1000 Pentium 100MHz	\$1,040
Q1000 Pentium 100MHz	\$1,040

## Mouse:

Q1000 Pentium 100MHz	\$920
Q1000 Pentium 100MHz	\$1,040

## Monitors:

Q1000 Pentium 100MHz	\$920
Q1000 Pentium 100MHz	\$1,040
Q1000 Pentium 100MHz	\$1,040
Q1000 Pentium 100MHz	\$1,040
Q1000 Pentium 100MHz	\$1,040
Q1000 Pentium 100MHz	\$1,040
Q1000 Pentium 100MHz	\$1,040
Q1000 Pentium 100MHz	\$1,040
Q1000 Pentium 100MHz	\$1,040
Q1000 Pentium 100MHz	\$1,040

## Printers:

Q1000 Pentium 100MHz	\$920
Q1000 Pentium 100MHz	\$1,040
Q1000 Pentium 100MHz	\$1,040
Q1000 Pentium 100MHz	\$1,040
Q1000 Pentium 100MHz	\$1,040
Q1000 Pentium 100MHz	\$1,040
Q1000 Pentium 100MHz	\$1,040
Q1000 Pentium 100MHz	\$1,040
Q1000 Pentium 100MHz	\$1,040
Q1000 Pentium 100MHz	\$1,040

## DVD/Compact Discs:

Q1000 Pentium 100MHz	\$920
Q1000 Pentium 100MHz	\$1,040
Q1000 Pentium 100MHz	\$1,040
Q1000 Pentium 100MHz	\$1,040
Q1000 Pentium 100MHz	\$1,040

## Sound Cards:

Q1000 Pentium 100MHz	\$920
Q1000 Pentium 100MHz	\$1,040

## Others:

Q1000 Pentium 100MHz	\$920
Q1000 Pentium 100MHz	\$1,040
Q1000 Pentium 100MHz	\$1,040
Q1000 Pentium 100MHz	\$1,040
Q1000 Pentium 100MHz	\$1,040

## Sub Total:

Discount:

Total:



# Building the multimedia studio

## Choosing the right software and hardware for multimedia

BY GRAEME RENNETT

Whether you are wanting to create original artwork, animations, digital video, audio or music, a computer is becoming an essential tool. From "multi-room" animation and cinema to an army even less complicated with it, and at the advanced software tools now available for PCs, Macs and other platforms. In this article, we'll discuss some common multimedia projects and the tools that we've found to be the best for producing them.

Multimedia, of course, can be defined a lot of ways. In this article, let's say we are trying to put together a system capable of creating and viewing good quality audio, graphics, animation and video for use in multimedia production and computer-based presentations.

Naturally, any time the word "good" is mentioned, there's the issue of just how good one wants the results to be. There are "low-cost/average" professional results, but then tend to be extremely expensive. Invested in tens or even hundreds of thousands of dollars. So, let's be generous with the terms and discuss our multimedia capability to achieve output suitable for use in professional corporate videos, Internet-based media and other "near broadcast-quality" applications but excluding the kind of \$20,000 and up systems that are capable of capturing and editing 99.95-quality video. This allows us to build our multimedia studio and still have a bonus to put it in.

What shall we include? In the audio realm, let's have CD quality, professional sounding 16-bit music, and the ability to edit music and sound and synchronize it with video or animation.

Our graphics capability will have to include the necessary tools to create both still and moving images, with quality appropriate for a variety of output formats such as slides, video, CD-ROM, the Internet or on-screen presentations.

Finally, there's the issue of the hardware. All these components are going to run on, because this clear has demand in the marketplace. Let's start there.

### Choosing the right multimedia system hardware

There's an ongoing argument. Is at this stage of the game, the latest PCs are better in multimedia than the latest Macs, and the software and hardware options for multi-media are considerably more plentiful for Macs than some important advantages when it comes to multimedia. Finally, then, the apparent paradox as you consider this statement:

"If you can afford a (and maybe even if you can't) get a PC and a Macintosh."

Check.

There are enough programs that run on Macs only or Windows only that it's just better to have access to the best of both in both aspects. Here are a few examples:

### The Mac advantage: illustration and paint programs, CD recording

Image Editing: while Photoshop is available, and roughly comparable on both platforms, the Mac is more suitable for working with higher-resolution images, using programs such as the PowerPaint (Apple's new MacPaint) for illustration artists a list of the leading graphics programs that should be part of your multimedia studio. See also: Adobe Photoshop 4.2, Adobe Illustrator 8.0, Macromedia Director, Paint Tools 4.0, RIT Free, and so on — show up first on the Mac, then building-edge. Image editing plug-ins such as Art's Effects Suite 3.0 for Macintosh.

Paint Tools 4.0, Macromedia Director, Paint Tools 4.0, RIT Free, and so on — show up first on the Mac, then building-edge. Image editing plug-ins such as Art's Effects Suite 3.0 for Macintosh. Paint Tools 4.0, Macromedia Director, Paint Tools 4.0, RIT Free, and so on — show up first on the Mac, then building-edge. Image editing plug-ins such as Art's Effects Suite 3.0 for Macintosh. Paint Tools 4.0, Macromedia Director, Paint Tools 4.0, RIT Free, and so on — show up first on the Mac, then building-edge. Image editing plug-ins such as Art's Effects Suite 3.0 for Macintosh.

As mentioned in the December 1995 issue, the Mac has an undeniable edge in the creation of CD-ROMs now. See my article entitled "Recording CD-ROMs in 1995" issue for details.

### The Windows advantage: audio and video editing programs

While there's no denying that Macs are a common sight in many recording studios and audio facilities, our tests suggest that the hardware and software to perform advanced audio and video manipulation is more advanced, either for digital or for PC. You can top a sound card with CD-quality 16-bit audio recording and playback for the PC for a couple of hundred dollars versus a Macintosh 14-bit digital audio card cost around a thousand.

Although most people using a Mac for audio and video work will be best served by an Apple Macintosh, modern alternatives. Multimedias Macs can hold a Digimaster AudioMedia or Sound Tools card to provide professional level capabilities beyond the more understated but still sound that comes standard on most Mac models.

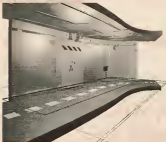
Traditionally, the tools for audio work are Windows or both platforms, and we can point to a many price tools available on the Mac as proof for the PC.

At the high end, the Mac has Digimaster Pro Tools, DSD, Deck 1000 was recently acquired by Macromedia. ImageLogic Audio Cables, Audio to name just a few of the more pre-quality direct-to-hard-disk audio recording systems. There's also Digimaster's Sample Cell, a computer-based, sample playback system, and a number of Macintosh MIDI sequencer programs that support 16-bit or 24-bit digital audio via ADAT, MIDI Time code, or the new independently used 888 sync system.

Overall, we find the system-level MIDI and audio support and multimedia functionality of Windows 95 to exceed that of the Mac, especially when comparing system-by-product.

David Wells, of White Line Location, Recording Ltd., of Vancouver, B.C., says \$1,000. Wells says the system helps him visualize digital multimedia capabilities. The hardware software system is also available for Macintosh software such as CD-ROM Deck printers similar multimedia capabilities on a Power Macintosh (without additional hardware).

Some users find the slow file system of the Mac OS to impede an application for hard-disk recording and playback, because Power Macintosh usually an advanced the system.



Korn  
Power Tools 3







# NU-AGE

**Affordable  
Computer &  
Communication  
Products**

## MONITORS

[illegible]

## PRINTERS

[illegible]

## MODELS

[illegible]

## FLOPPY DRIVES

1. **What is the main purpose of the study?**  
2. **What are the research objectives?**  
3. **What is the significance of the study?**

## VIDEO CARDS

1. The first step is to identify the problem. In this case, the problem is that the company is not meeting its sales targets.

## HARD DRIVES

1. The first step is to identify the problem or question that needs to be answered. This involves understanding the context and the specific requirements of the task.

## RAM

1000

## TAPE BACKUP

**TAPE BACKS**  
ON TAPE DECKS: THE NEW  
ON TAPE DECKS: THE NEW  
ON TAPE DECKS: THE NEW  
ON TAPE DECKS: THE NEW

## SOFTWARE

**GET IT FIRST!**  
 The first 100 copies of this book will be given away for free. To receive your free copy, visit [www.mhprofessional.com/9780070871911](http://www.mhprofessional.com/9780070871911) and enter the code 9780070871911.

**Monthly Special**  
1MB 30 pin SIMM **\$39.00 ea.**

### Computer Problems

Upgrade 386's, 486's, Monitor Repair,  
Hard Drive Upgrades

### Notepad

ATTACH COMPANY'S HONOR 101	
—The year-2000 484-491 (2000)	\$3078
—Original year-2000 1 x 1000 (2000)	
—Original year-2000 1 x 1000 (2000)	\$100
—Original year-2000 1 x 1000 (2000)	\$100
—Original year-2000 1 x 1000 (2000)	\$100

[illegible][illegible]

**We support and service:**



**Treatment**  
and limited  
disproportionate  
response  
New York  
University

Complete JEM and Macromedia  
server management  
E-mail & FTP gateway  
Remote Access - Backup

We support and

800-755-7223  
 1-800-755-7223  
 1-800-755-7223  
 1-800-755-7223  
 1-800-755-7223

**We're Accustomed to Your Networking Needs**

[illegible]

**M/S HOME  
CD ROM  
PACKAGE**

[illegible]

\$399



**CONCLUSIONS**

**DISCOUNTS HOWTO:**  
**MON-FRI 9:00-6:00**  
**SAT 11:00-5:00**

JUST PARKING AT 12:00.

3 YEAR CLASS 1 CLASSROOM TEACHERS, 2000  
 FOLLOWS THE STATE OF CALIFORNIA STANDARDS FOR  
 EDUCATION. THE COURSE IS DESIGNED TO PROVIDE  
 STUDENTS WITH THE KNOWLEDGE AND SKILLS  
 NEEDED TO BE SUCCESSFUL IN THE CLASSROOM.

## Build the multimedia studio

Continued from page 42

loaded the original animations but used Autodesk 3DFlx when compositing with the Intellivision video card.

On the Mac, we preferred the animation capabilities of Spec and Intellivision's Select4.

The files we used to assemble our multimedia projects were Intellivision 540 (not 40) — and 30 colors were preferred — just



VideoShop (Mac) and Intellivision Pro (PC) but, in the long run, it was Intellivision — specifically the Intellivision rendering — we turned to to get the grant work done. However, the Intellivision and ProRender for Mac have remarkable differences in export capabilities. The Intellivision has the ability to convert QuickTime movies to and from the AVI format.

proved to be a useful feature making them Mac versions as did the ability to work in the popular 3D and 2D animation formats. These reasons we found ourselves turning to the PC version more than the Mac ability.

### Audio and video output

How is the Computer System for always been a stage in projects on the go, as individuals are paper-based publications. We have a third Video Shop site with our graphics, animation and 3D-rendered scenes. Over the past year, we have produced some productions on both television and radio. In radio, we regularly record a one CD-ROM, and we produce products that are both shown and other projects. We are now producing advertising for the new projects and the platform we use to do the jobs. Now that is most on their tools were chosen for their ability to get the job done quickly, and sometimes because they were "the best" in their formats.

3D modeling and animation: Autodesk 3DFlx (Windows), Jvarkit Intellivision (Mac), Caligula 3D (Windows), ProRender (Mac), Space Builder (Windows), Power Animator (Mac).

3D modeling and animation: Autodesk 3DFlx (Windows), Jvarkit Intellivision (Mac), Caligula 3D (Windows), ProRender (Mac), Space Builder (Windows), Power Animator (Mac).

3D modeling and animation: Autodesk 3DFlx (Windows), Jvarkit Intellivision (Mac), Caligula 3D (Windows), ProRender (Mac), Space Builder (Windows), Power Animator (Mac).

3D modeling and animation: Autodesk 3DFlx (Windows), Jvarkit Intellivision (Mac), Caligula 3D (Windows), ProRender (Mac), Space Builder (Windows), Power Animator (Mac).

3D modeling and animation: Autodesk 3DFlx (Windows), Jvarkit Intellivision (Mac), Caligula 3D (Windows), ProRender (Mac), Space Builder (Windows), Power Animator (Mac).

3D modeling and animation: Autodesk 3DFlx (Windows), Jvarkit Intellivision (Mac), Caligula 3D (Windows), ProRender (Mac), Space Builder (Windows), Power Animator (Mac).

3D modeling and animation: Autodesk 3DFlx (Windows), Jvarkit Intellivision (Mac), Caligula 3D (Windows), ProRender (Mac), Space Builder (Windows), Power Animator (Mac).

3D modeling and animation: Autodesk 3DFlx (Windows), Jvarkit Intellivision (Mac), Caligula 3D (Windows), ProRender (Mac), Space Builder (Windows), Power Animator (Mac).

3D modeling and animation: Autodesk 3DFlx (Windows), Jvarkit Intellivision (Mac), Caligula 3D (Windows), ProRender (Mac), Space Builder (Windows), Power Animator (Mac).

3D modeling and animation: Autodesk 3DFlx (Windows), Jvarkit Intellivision (Mac), Caligula 3D (Windows), ProRender (Mac), Space Builder (Windows), Power Animator (Mac).

3D modeling and animation: Autodesk 3DFlx (Windows), Jvarkit Intellivision (Mac), Caligula 3D (Windows), ProRender (Mac), Space Builder (Windows), Power Animator (Mac).

3D modeling and animation: Autodesk 3DFlx (Windows), Jvarkit Intellivision (Mac), Caligula 3D (Windows), ProRender (Mac), Space Builder (Windows), Power Animator (Mac).

3D modeling and animation: Autodesk 3DFlx (Windows), Jvarkit Intellivision (Mac), Caligula 3D (Windows), ProRender (Mac), Space Builder (Windows), Power Animator (Mac).

3D modeling and animation: Autodesk 3DFlx (Windows), Jvarkit Intellivision (Mac), Caligula 3D (Windows), ProRender (Mac), Space Builder (Windows), Power Animator (Mac).

3D modeling and animation: Autodesk 3DFlx (Windows), Jvarkit Intellivision (Mac), Caligula 3D (Windows), ProRender (Mac), Space Builder (Windows), Power Animator (Mac).

3D modeling and animation: Autodesk 3DFlx (Windows), Jvarkit Intellivision (Mac), Caligula 3D (Windows), ProRender (Mac), Space Builder (Windows), Power Animator (Mac).

3D modeling and animation: Autodesk 3DFlx (Windows), Jvarkit Intellivision (Mac), Caligula 3D (Windows), ProRender (Mac), Space Builder (Windows), Power Animator (Mac).

3D modeling and animation: Autodesk 3DFlx (Windows), Jvarkit Intellivision (Mac), Caligula 3D (Windows), ProRender (Mac), Space Builder (Windows), Power Animator (Mac).

3D modeling and animation: Autodesk 3DFlx (Windows), Jvarkit Intellivision (Mac), Caligula 3D (Windows), ProRender (Mac), Space Builder (Windows), Power Animator (Mac).

3D modeling and animation: Autodesk 3DFlx (Windows), Jvarkit Intellivision (Mac), Caligula 3D (Windows), ProRender (Mac), Space Builder (Windows), Power Animator (Mac).

3D modeling and animation: Autodesk 3DFlx (Windows), Jvarkit Intellivision (Mac), Caligula 3D (Windows), ProRender (Mac), Space Builder (Windows), Power Animator (Mac).

# Tricera Computer

Sales  
Rentals  
Training

## Looking for a Scanner?

High end scanners at prices that will surprise you  
Bring in a photo or slide for a hands-on demo



Agfa

EPSON

HP

Polaroid

UMAX

Special: EPSON Stylus Color PRO XL \$2500

Wacom  
ArtPads  
4 x 6  
8 x 6  
12 x 12  
12 x 18  
18 x 26



iomega  
Zip  
Drives

203 1838 West 6th Avenue at Burrard Street Phone 733-5702  
EPSON Authorized Warranty Service - Supplies - Sales





# Computer Exchange

## pentium

## Pentium Power

486 Pentium CPU  
100 MHz/33MHz  
3 MB RAM (up to 128MB)  
14MB Turbo Drive  
1.30 CD ROM Drive  
2 base 14000 1 Monitor Port  
PCI bus VGA, 1 MB up to 2 MB  
12 and base Core  
200K CPU Power Supply  
124 key Win/5 Keyboard/Voice  
14" monochrome VGA monitor (316)

RAMCOZEN  
20 KVCN  
\$209.00



CEX P100 SYSTEM \$1,799<sup>00</sup>  
CEX P120 SYSTEM \$1,895<sup>00</sup>  
CEX P133 SYSTEM \$2,065<sup>00</sup>

## February Specials

### Cardinal Modems

Int. 28.8K V.34 FAX/MODEM \$ 209<sup>00</sup>  
Int. 28.8K Voice/FAX/MODEM \$ 239<sup>00</sup>

### Specialty Keyboards

104 Key Win/95 w/Track \$ 129<sup>00</sup>  
104 Key Win/95 w/Pointer \$ 129<sup>00</sup>  
Spacesaver 84 key \$ 89<sup>00</sup>

### MiroConnect All-In-One

28.8K Modem/14.4K FAX  
Voice Mail w/Caller ID  
WaveTable sound card  
MS-Windows 95 comp. \$ 349<sup>00</sup>

### Best Value Pentium

Complete 336 megabyte  
Pentium 100 MHz CPU  
Active Drive 2000  
4 MB 33MHz 40 128 MB  
1 MB RAM Turbo Drive  
100 MB 1200 1200 drive  
Sound Blaster 16  
EX 200 CD-ROM  
12" monochrome VGA  
200W CPU Power Supply  
124 key Enhanced Keyboard  
14" 100 MHz 28.8K/Modem  
40-000 16 28.8K/Modem V.31

Spine hard  
cache  
\$ 55.00  
extra.

Value System \$2,049<sup>00</sup>

### Diamond Edge 3D Multimedia

100 MHz Pentium 100 MHz CPU  
28.8K V.34 Modem/Voice  
4 MB 33MHz 40 128 MB  
1.30 40 128 MB Turbo Drive  
100 MB 1200 1200 drive  
Sound Blaster 16  
EX 200 CD-ROM  
12" monochrome VGA  
200W CPU Power Supply  
124 key Enhanced Keyboard  
14" 100 MHz 28.8K/Modem  
40-000 16 28.8K/Modem V.31

RAMCOZEN  
20 KVCN  
\$209.00

EDGE 3D \$2,289<sup>00</sup>

### Packard Bell Demo Clearance

100 MHz Pentium 100 MHz CPU  
28.8K V.34 Modem/Voice  
4 MB 33MHz 40 128 MB  
1.30 40 128 MB Turbo Drive  
100 MB 1200 1200 drive  
Sound Blaster 16  
EX 200 CD-ROM  
12" monochrome VGA  
200W CPU Power Supply  
124 key Enhanced Keyboard  
14" 100 MHz 28.8K/Modem  
40-000 16 28.8K/Modem V.31

PB-100 Multimedia \$ 1,999<sup>00</sup>



Combo  
28.8K V.34  
Modem/Voice  
\$ 49<sup>00</sup>  
PCI Power  
\$ 89<sup>00</sup>

Cyrix

### NETWORK HARDWARE

3COM 3C900B 10/100 Base-T Ethernet Adapter	\$ 149.95
3COM 3C900B 10/100 Base-T Ethernet Adapter	\$ 149.95
3COM 3C900B 10/100 Base-T Ethernet Adapter	\$ 149.95
3COM 3C900B 10/100 Base-T Ethernet Adapter	\$ 149.95
3COM 3C900B 10/100 Base-T Ethernet Adapter	\$ 149.95
3COM 3C900B 10/100 Base-T Ethernet Adapter	\$ 149.95
3COM 3C900B 10/100 Base-T Ethernet Adapter	\$ 149.95
3COM 3C900B 10/100 Base-T Ethernet Adapter	\$ 149.95
3COM 3C900B 10/100 Base-T Ethernet Adapter	\$ 149.95
3COM 3C900B 10/100 Base-T Ethernet Adapter	\$ 149.95

### STORAGE MEDIA

3M 3590 3.5" 100 MB 5.25" Diskette	\$ 1.99
3M 3590 3.5" 100 MB 5.25" Diskette	\$ 1.99
3M 3590 3.5" 100 MB 5.25" Diskette	\$ 1.99
3M 3590 3.5" 100 MB 5.25" Diskette	\$ 1.99
3M 3590 3.5" 100 MB 5.25" Diskette	\$ 1.99
3M 3590 3.5" 100 MB 5.25" Diskette	\$ 1.99
3M 3590 3.5" 100 MB 5.25" Diskette	\$ 1.99
3M 3590 3.5" 100 MB 5.25" Diskette	\$ 1.99
3M 3590 3.5" 100 MB 5.25" Diskette	\$ 1.99
3M 3590 3.5" 100 MB 5.25" Diskette	\$ 1.99

### PRINTERS & MODEMS

3M 3590 3.5" 100 MB 5.25" Diskette	\$ 1.99
3M 3590 3.5" 100 MB 5.25" Diskette	\$ 1.99
3M 3590 3.5" 100 MB 5.25" Diskette	\$ 1.99
3M 3590 3.5" 100 MB 5.25" Diskette	\$ 1.99
3M 3590 3.5" 100 MB 5.25" Diskette	\$ 1.99
3M 3590 3.5" 100 MB 5.25" Diskette	\$ 1.99
3M 3590 3.5" 100 MB 5.25" Diskette	\$ 1.99
3M 3590 3.5" 100 MB 5.25" Diskette	\$ 1.99
3M 3590 3.5" 100 MB 5.25" Diskette	\$ 1.99
3M 3590 3.5" 100 MB 5.25" Diskette	\$ 1.99

### NETWORK SOFTWARE

3M 3590 3.5" 100 MB 5.25" Diskette	\$ 1.99
3M 3590 3.5" 100 MB 5.25" Diskette	\$ 1.99
3M 3590 3.5" 100 MB 5.25" Diskette	\$ 1.99
3M 3590 3.5" 100 MB 5.25" Diskette	\$ 1.99
3M 3590 3.5" 100 MB 5.25" Diskette	\$ 1.99
3M 3590 3.5" 100 MB 5.25" Diskette	\$ 1.99
3M 3590 3.5" 100 MB 5.25" Diskette	\$ 1.99
3M 3590 3.5" 100 MB 5.25" Diskette	\$ 1.99
3M 3590 3.5" 100 MB 5.25" Diskette	\$ 1.99
3M 3590 3.5" 100 MB 5.25" Diskette	\$ 1.99

### MONITORS & FLOPPY DRIVES

3M 3590 3.5" 100 MB 5.25" Diskette	\$ 1.99
3M 3590 3.5" 100 MB 5.25" Diskette	\$ 1.99
3M 3590 3.5" 100 MB 5.25" Diskette	\$ 1.99
3M 3590 3.5" 100 MB 5.25" Diskette	\$ 1.99
3M 3590 3.5" 100 MB 5.25" Diskette	\$ 1.99
3M 3590 3.5" 100 MB 5.25" Diskette	\$ 1.99
3M 3590 3.5" 100 MB 5.25" Diskette	\$ 1.99
3M 3590 3.5" 100 MB 5.25" Diskette	\$ 1.99
3M 3590 3.5" 100 MB 5.25" Diskette	\$ 1.99
3M 3590 3.5" 100 MB 5.25" Diskette	\$ 1.99

### ACCESSORIES

3M 3590 3.5" 100 MB 5.25" Diskette	\$ 1.99
3M 3590 3.5" 100 MB 5.25" Diskette	\$ 1.99
3M 3590 3.5" 100 MB 5.25" Diskette	\$ 1.99
3M 3590 3.5" 100 MB 5.25" Diskette	\$ 1.99
3M 3590 3.5" 100 MB 5.25" Diskette	\$ 1.99
3M 3590 3.5" 100 MB 5.25" Diskette	\$ 1.99
3M 3590 3.5" 100 MB 5.25" Diskette	\$ 1.99
3M 3590 3.5" 100 MB 5.25" Diskette	\$ 1.99
3M 3590 3.5" 100 MB 5.25" Diskette	\$ 1.99
3M 3590 3.5" 100 MB 5.25" Diskette	\$ 1.99

Prices and items subject to change without notice. Prices based on Cash or CASH/CD OUTLET. Use and MasterCard accepted. 2% Service Charge.

### COMPUTER

#### Store Hours

Monday 10am to 6pm  
Tuesday 10am to 6pm  
Closed Sunday and Holiday

EXCHANGE

650 Seymour Street  
Vancouver, B.C.  
V6B 3K4

(604) 683-1788  
Fax: (604) 683-1333







# BESTOP

SALES & SERVICE CENTRE

4058 CAMBIE ST. VANCOUVER  
B.C. V5Z 2N6 (Parking at Road)  
(Complete & King Hardware)  
(Tel) 879-6533 (Fax) 879-6223  
Monday: 9:30am-6:30pm  
Sunday: 10:00am-6:00pm

## 4X MPEG MULTIMEDIA

### PENTIUM 100MHZ

Intel® Pentium Processor  
128-KB SINK W/ COOLING FAN  
8MB RAM, 256K EXT. CACHE  
1.44MB FLOPPY DRIVE  
4058MB EIDE HARD DRIVE  
Diamond Stealth II Accelerated Video, 15" SVGA Monitor, Mouse, 3Dg  
Built-In PCI EIDE Controller, 251P  
33-CPU, Aggravated PS Mod, Tower Case  
101-Key Enhanced Keyboard  
2-Channel 4x Speed CDROM Drive  
Sound Blaster 16 Sound Card  
Pair of Magnetic Shielded Speakers  
FREE MS Encarta 1995  
FREE MS WORKS 3.0  
FREE MS MONEY  
FREE MS SCENE  
FREE CD SAMPLER

**\$2,199**

### PENTIUM 120MHZ

Intel® Pentium Processor  
HEAT SINK W/ COOLING FAN  
8MB RAM, 256K EXT. CACHE  
1.44MB FLOPPY DRIVE  
4058MB EIDE HARD DRIVE  
Diamond Stealth II Accelerated Video, 15" SVGA Monitor, Mouse, 3Dg  
Built-In PCI EIDE Controller, 251P  
33-CPU, Aggravated PS Mod, Tower Case  
101-Key Enhanced Keyboard

**\$1,899** FREE  
Mouse & Keyboard

### PENTIUM 150MHZ

Intel® Pentium Processor  
HEAT SINK W/ COOLING FAN  
8MB RAM, 256K EXT. CACHE  
1.44MB FLOPPY DRIVE  
4058MB EIDE HARD DRIVE  
Diamond Stealth II Accelerated Video, 15" SVGA Monitor, Mouse, 3Dg  
Built-In PCI EIDE Controller, 251P  
33-CPU, Aggravated PS Mod, Tower Case  
101-Key Enhanced Keyboard

**\$2,199** FREE  
Mouse & Keyboard

### PENTIUM 133MHZ

Intel® Pentium Processor  
HEAT SINK W/ COOLING FAN  
8MB RAM, 256K EXT. CACHE  
1.44MB FLOPPY DRIVE  
4058MB EIDE HARD DRIVE  
Diamond Stealth II Accelerated Video, 15" SVGA Monitor, Mouse, 3Dg  
Built-In PCI EIDE Controller, 251P  
33-CPU, Aggravated PS Mod, Tower Case  
101-Key Enhanced Keyboard

**\$2,399** FREE  
Mouse & Keyboard

### 486DX/4 100MHZ

AMD-K5D 486 100MHZ CPU  
HEAT SINK W/ COOLING FAN  
4MB RAM, 256K EXT. CACHE  
1.44MB FLOPPY DRIVE  
4058MB EIDE HARD DRIVE  
Trident PCI Graphics Card, 1MB  
15" SVGA Monitor, Mouse, 3Dg  
Built-In PCI EIDE Controller, 251P  
33-CPU, Aggravated PS Mod, Tower Case  
101-Key Enhanced Keyboard

**\$1,249** FREE  
Mouse & Keyboard

## 4X SPEED MULTIMEDIA

### PENTIUM 75MHZ

Intel® Pentium Processor  
HEAT SINK W/ COOLING FAN  
8MB RAM, 256K EXT. CACHE  
1.44MB FLOPPY DRIVE  
4058MB EIDE HARD DRIVE  
Diamond Stealth II Accelerated Video, 15" SVGA Monitor, Mouse, 3Dg  
Built-In PCI EIDE Controller, 251P  
33-CPU, Aggravated PS Mod, Tower Case  
101-Key Enhanced Keyboard  
Pinnacle 4x Speed CDROM Drive  
Sound Blaster 16 Sound Card  
Pair of Magnetic Shielded Speakers  
FREE Encarta Encyclopedia  
FREE Movie Teachers Typing  
FREE US ATLAS  
FREE World Atlas  
FREE Chess

**\$1,749**

## 6XSPEED MULTIMEDIA KIT

6X SPEED INT. CD ROM DRIVE  
Sound Blaster 16 Sound Card  
MAVIA TEACHERS TYPING  
US ATLAS  
WORLD ATLAS  
CHERRY MASTER  
PROMOTECH  
PAIR OF SPEAKERS,  
MICROPHONE

**\$399**

## 4X SPEED MULTIMEDIA KIT

4X SPEED INT. CD ROM DRIVE  
Sound Blaster 16 Sound Card  
Pair of Shielded Speakers  
GEMINI ENCICLOPEDIA  
MAVIA TEACHERS TYPING  
US & WORLD ATLAS  
CHERRY MASTER

**\$289**

## BUDGET MULTIMEDIA

2X SPEED INT. CD ROM DRIVE  
Sound Blaster 16 Sound Card  
Pair of Shielded Speakers  
MAVIA TEACHERS TYPING  
US ATLAS, PROMOTECH  
WORLD ATLAS  
CHERRY MASTER

**\$219**

### NEW PRODUCT LBP-460 LASER

300 DPI W/ Canon's  
AIR Technology  
MS Windows  
Printing Systems  
2-Year Replacement  
Warranty

**\$ 479.00**

### NEW PRICE BJC-4000

Latest-Quinty TUBE  
black at 1200x60 dpi  
Up to 5 Pages  
Per Minutes  
Complete w/  
BC-20 & BC-21 ink

**\$ 389.00**

### NEW PRODUCT BAC-210 COLOR

Stoke printing 6496,  
1,400 dpi, random  
Incredible color at  
360x360 dpi  
Affordable color for  
home and business

**\$ 349.00**

### MONITOR

NEC 15" 1024 3840  
NEC 15" 1024 3840  
NEC 15" 1024 3840  
NEC 15" 1024 3840  
NEC 15" 1024 3840  
NEC 15" 1024 3840  
NEC 15" 1024 3840  
NEC 15" 1024 3840  
NEC 15" 1024 3840  
NEC 15" 1024 3840

### HARD DRIVE

IDE 420MB \$215  
IDE 540MB \$225  
IDE 680MB \$235  
IDE 840MB \$245  
IDE 1.0GB \$255  
IDE 1.2GB \$265  
IDE 1.4GB \$275  
IDE 1.6GB \$285  
IDE 1.8GB \$295  
IDE 2.0GB \$305  
IDE 2.1GB \$315  
IDE 2.2GB \$325  
IDE 2.3GB \$335  
IDE 2.4GB \$345  
IDE 2.5GB \$355  
IDE 2.6GB \$365  
IDE 2.7GB \$375  
IDE 2.8GB \$385  
IDE 2.9GB \$395  
IDE 3.0GB \$405  
IDE 3.1GB \$415  
IDE 3.2GB \$425  
IDE 3.3GB \$435  
IDE 3.4GB \$445  
IDE 3.5GB \$455  
IDE 3.6GB \$465  
IDE 3.7GB \$475  
IDE 3.8GB \$485  
IDE 3.9GB \$495  
IDE 4.0GB \$505  
IDE 4.1GB \$515  
IDE 4.2GB \$525  
IDE 4.3GB \$535  
IDE 4.4GB \$545  
IDE 4.5GB \$555  
IDE 4.6GB \$565  
IDE 4.7GB \$575  
IDE 4.8GB \$585  
IDE 4.9GB \$595  
IDE 5.0GB \$605  
IDE 5.1GB \$615  
IDE 5.2GB \$625  
IDE 5.3GB \$635  
IDE 5.4GB \$645  
IDE 5.5GB \$655  
IDE 5.6GB \$665  
IDE 5.7GB \$675  
IDE 5.8GB \$685  
IDE 5.9GB \$695  
IDE 6.0GB \$705  
IDE 6.1GB \$715  
IDE 6.2GB \$725  
IDE 6.3GB \$735  
IDE 6.4GB \$745  
IDE 6.5GB \$755  
IDE 6.6GB \$765  
IDE 6.7GB \$775  
IDE 6.8GB \$785  
IDE 6.9GB \$795  
IDE 7.0GB \$805  
IDE 7.1GB \$815  
IDE 7.2GB \$825  
IDE 7.3GB \$835  
IDE 7.4GB \$845  
IDE 7.5GB \$855  
IDE 7.6GB \$865  
IDE 7.7GB \$875  
IDE 7.8GB \$885  
IDE 7.9GB \$895  
IDE 8.0GB \$905  
IDE 8.1GB \$915  
IDE 8.2GB \$925  
IDE 8.3GB \$935  
IDE 8.4GB \$945  
IDE 8.5GB \$955  
IDE 8.6GB \$965  
IDE 8.7GB \$975  
IDE 8.8GB \$985  
IDE 8.9GB \$995  
IDE 9.0GB \$1005  
IDE 9.1GB \$1015  
IDE 9.2GB \$1025  
IDE 9.3GB \$1035  
IDE 9.4GB \$1045  
IDE 9.5GB \$1055  
IDE 9.6GB \$1065  
IDE 9.7GB \$1075  
IDE 9.8GB \$1085  
IDE 9.9GB \$1095  
IDE 10.0GB \$1105  
IDE 10.1GB \$1115  
IDE 10.2GB \$1125  
IDE 10.3GB \$1135  
IDE 10.4GB \$1145  
IDE 10.5GB \$1155  
IDE 10.6GB \$1165  
IDE 10.7GB \$1175  
IDE 10.8GB \$1185  
IDE 10.9GB \$1195  
IDE 11.0GB \$1205  
IDE 11.1GB \$1215  
IDE 11.2GB \$1225  
IDE 11.3GB \$1235  
IDE 11.4GB \$1245  
IDE 11.5GB \$1255  
IDE 11.6GB \$1265  
IDE 11.7GB \$1275  
IDE 11.8GB \$1285  
IDE 11.9GB \$1295  
IDE 12.0GB \$1305  
IDE 12.1GB \$1315  
IDE 12.2GB \$1325  
IDE 12.3GB \$1335  
IDE 12.4GB \$1345  
IDE 12.5GB \$1355  
IDE 12.6GB \$1365  
IDE 12.7GB \$1375  
IDE 12.8GB \$1385  
IDE 12.9GB \$1395  
IDE 13.0GB \$1405  
IDE 13.1GB \$1415  
IDE 13.2GB \$1425  
IDE 13.3GB \$1435  
IDE 13.4GB \$1445  
IDE 13.5GB \$1455  
IDE 13.6GB \$1465  
IDE 13.7GB \$1475  
IDE 13.8GB \$1485  
IDE 13.9GB \$1495  
IDE 14.0GB \$1505  
IDE 14.1GB \$1515  
IDE 14.2GB \$1525  
IDE 14.3GB \$1535  
IDE 14.4GB \$1545  
IDE 14.5GB \$1555  
IDE 14.6GB \$1565  
IDE 14.7GB \$1575  
IDE 14.8GB \$1585  
IDE 14.9GB \$1595  
IDE 15.0GB \$1605  
IDE 15.1GB \$1615  
IDE 15.2GB \$1625  
IDE 15.3GB \$1635  
IDE 15.4GB \$1645  
IDE 15.5GB \$1655  
IDE 15.6GB \$1665  
IDE 15.7GB \$1675  
IDE 15.8GB \$1685  
IDE 15.9GB \$1695  
IDE 16.0GB \$1705  
IDE 16.1GB \$1715  
IDE 16.2GB \$1725  
IDE 16.3GB \$1735  
IDE 16.4GB \$1745  
IDE 16.5GB \$1755  
IDE 16.6GB \$1765  
IDE 16.7GB \$1775  
IDE 16.8GB \$1785  
IDE 16.9GB \$1795  
IDE 17.0GB \$1805  
IDE 17.1GB \$1815  
IDE 17.2GB \$1825  
IDE 17.3GB \$1835  
IDE 17.4GB \$1845  
IDE 17.5GB \$1855  
IDE 17.6GB \$1865  
IDE 17.7GB \$1875  
IDE 17.8GB \$1885  
IDE 17.9GB \$1895  
IDE 18.0GB \$1905  
IDE 18.1GB \$1915  
IDE 18.2GB \$1925  
IDE 18.3GB \$1935  
IDE 18.4GB \$1945  
IDE 18.5GB \$1955  
IDE 18.6GB \$1965  
IDE 18.7GB \$1975  
IDE 18.8GB \$1985  
IDE 18.9GB \$1995  
IDE 19.0GB \$2005  
IDE 19.1GB \$2015  
IDE 19.2GB \$2025  
IDE 19.3GB \$2035  
IDE 19.4GB \$2045  
IDE 19.5GB \$2055  
IDE 19.6GB \$2065  
IDE 19.7GB \$2075  
IDE 19.8GB \$2085  
IDE 19.9GB \$2095  
IDE 20.0GB \$2105  
IDE 20.1GB \$2115  
IDE 20.2GB \$2125  
IDE 20.3GB \$2135  
IDE 20.4GB \$2145  
IDE 20.5GB \$2155  
IDE 20.6GB \$2165  
IDE 20.7GB \$2175  
IDE 20.8GB \$2185  
IDE 20.9GB \$2195  
IDE 21.0GB \$2205  
IDE 21.1GB \$2215  
IDE 21.2GB \$2225  
IDE 21.3GB \$2235  
IDE 21.4GB \$2245  
IDE 21.5GB \$2255  
IDE 21.6GB \$2265  
IDE 21.7GB \$2275  
IDE 21.8GB \$2285  
IDE 21.9GB \$2295  
IDE 22.0GB \$2305  
IDE 22.1GB \$2315  
IDE 22.2GB \$2325  
IDE 22.3GB \$2335  
IDE 22.4GB \$2345  
IDE 22.5GB \$2355  
IDE 22.6GB \$2365  
IDE 22.7GB \$2375  
IDE 22.8GB \$2385  
IDE 22.9GB \$2395  
IDE 23.0GB \$2405  
IDE 23.1GB \$2415  
IDE 23.2GB \$2425  
IDE 23.3GB \$2435  
IDE 23.4GB \$2445  
IDE 23.5GB \$2455  
IDE 23.6GB \$2465  
IDE 23.7GB \$2475  
IDE 23.8GB \$2485  
IDE 23.9GB \$2495  
IDE 24.0GB \$2505  
IDE 24.1GB \$2515  
IDE 24.2GB \$2525  
IDE 24.3GB \$2535  
IDE 24.4GB \$2545  
IDE 24.5GB \$2555  
IDE 24.6GB \$2565  
IDE 24.7GB \$2575  
IDE 24.8GB \$2585  
IDE 24.9GB \$2595  
IDE 25.0GB \$2605  
IDE 25.1GB \$2615  
IDE 25.2GB \$2625  
IDE 25.3GB \$2635  
IDE 25.4GB \$2645  
IDE 25.5GB \$2655  
IDE 25.6GB \$2665  
IDE 25.7GB \$2675  
IDE 25.8GB \$2685  
IDE 25.9GB \$2695  
IDE 26.0GB \$2705  
IDE 26.1GB \$2715  
IDE 26.2GB \$2725  
IDE 26.3GB \$2735  
IDE 26.4GB \$2745  
IDE 26.5GB \$2755  
IDE 26.6GB \$2765  
IDE 26.7GB \$2775  
IDE 26.8GB \$2785  
IDE 26.9GB \$2795  
IDE 27.0GB \$2805  
IDE 27.1GB \$2815  
IDE 27.2GB \$2825  
IDE 27.3GB \$2835  
IDE 27.4GB \$2845  
IDE 27.5GB \$2855  
IDE 27.6GB \$2865  
IDE 27.7GB \$2875  
IDE 27.8GB \$2885  
IDE 27.9GB \$2895  
IDE 28.0GB \$2905  
IDE 28.1GB \$2915  
IDE 28.2GB \$2925  
IDE 28.3GB \$2935  
IDE 28.4GB \$2945  
IDE 28.5GB \$2955  
IDE 28.6GB \$2965  
IDE 28.7GB \$2975  
IDE 28.8GB \$2985  
IDE 28.9GB \$2995  
IDE 29.0GB \$3005  
IDE 29.1GB \$3015  
IDE 29.2GB \$3025  
IDE 29.3GB \$3035  
IDE 29.4GB \$3045  
IDE 29.5GB \$3055  
IDE 29.6GB \$3065  
IDE 29.7GB \$3075  
IDE 29.8GB \$3085  
IDE 29.9GB \$3095  
IDE 30.0GB \$3105  
IDE 30.1GB \$3115  
IDE 30.2GB \$3125  
IDE 30.3GB \$3135  
IDE 30.4GB \$3145  
IDE 30.5GB \$3155  
IDE 30.6GB \$3165  
IDE 30.7GB \$3175  
IDE 30.8GB \$3185  
IDE 30.9GB \$3195  
IDE 31.0GB \$3205  
IDE 31.1GB \$3215  
IDE 31.2GB \$3225  
IDE 31.3GB \$3235  
IDE 31.4GB \$3245  
IDE 31.5GB \$3255  
IDE 31.6GB \$3265  
IDE 31.7GB \$3275  
IDE 31.8GB \$3285  
IDE 31.9GB \$3295  
IDE 32.0GB \$3305  
IDE 32.1GB \$3315  
IDE 32.2GB \$3325  
IDE 32.3GB \$3335  
IDE 32.4GB \$3345  
IDE 32.5GB \$3355  
IDE 32.6GB \$3365  
IDE 32.7GB \$3375  
IDE 32.8GB \$3385  
IDE 32.9GB \$3395  
IDE 33.0GB \$3405  
IDE 33.1GB \$3415  
IDE 33.2GB \$3425  
IDE 33.3GB \$3435  
IDE 33.4GB \$3445  
IDE 33.5GB \$3455  
IDE 33.6GB \$3465  
IDE 33.7GB \$3475  
IDE 33.8GB \$3485  
IDE 33.9GB \$3495  
IDE 34.0GB \$3505  
IDE 34.1GB \$3515  
IDE 34.2GB \$3525  
IDE 34.3GB \$3535  
IDE 34.4GB \$3545  
IDE 34.5GB \$3555  
IDE 34.6GB \$3565  
IDE 34.7GB \$3575  
IDE 34.8GB \$3585  
IDE 34.9GB \$3595  
IDE 35.0GB \$3605  
IDE 35.1GB \$3615  
IDE 35.2GB \$3625  
IDE 35.3GB \$3635  
IDE 35.4GB \$3645  
IDE 35.5GB \$3655  
IDE 35.6GB \$3665  
IDE 35.7GB \$3675  
IDE 35.8GB \$3685  
IDE 35.9GB \$3695  
IDE 36.0GB \$3705  
IDE 36.1GB \$3715  
IDE 36.2GB \$3725  
IDE 36.3GB \$3735  
IDE 36.4GB \$3745  
IDE 36.5GB \$3755  
IDE 36.6GB \$3765  
IDE 36.7GB \$3775  
IDE 36.8GB \$3785  
IDE 36.9GB \$3795  
IDE 37.0GB \$3805  
IDE 37.1GB \$3815  
IDE 37.2GB \$3825  
IDE 37.3GB \$3835  
IDE 37.4GB \$3845  
IDE 37.5GB \$3855  
IDE 37.6GB \$3865  
IDE 37.7GB \$3875  
IDE 37.8GB \$3885  
IDE 37.9GB \$3895  
IDE 38.0GB \$3905  
IDE 38.1GB \$3915  
IDE 38.2GB \$3925  
IDE 38.3GB \$3935  
IDE 38.4GB \$3945  
IDE 38.5GB \$3955  
IDE 38.6GB \$3965  
IDE 38.7GB \$3975  
IDE 38.8GB \$3985  
IDE 38.9GB \$3995  
IDE 39.0GB \$4005  
IDE 39.1GB \$4015  
IDE 39.2GB \$4025  
IDE 39.3GB \$4035  
IDE 39.4GB \$4045  
IDE 39.5GB \$4055  
IDE 39.6GB \$4065  
IDE 39.7GB \$4075  
IDE 39.8GB \$4085  
IDE 39.9GB \$4095  
IDE 40.0GB \$4105  
IDE 40.1GB \$4115  
IDE 40.2GB \$4125  
IDE 40.3GB \$4135  
IDE 40.4GB \$4145  
IDE 40.5GB \$4155  
IDE 40.6GB \$4165  
IDE 40.7GB \$4175  
IDE 40.8GB \$4185  
IDE 40.9GB \$4195  
IDE 41.0GB \$4205  
IDE 41.1GB \$4215  
IDE 41.2GB \$4225  
IDE 41.3GB \$4235  
IDE 41.4GB \$4245  
IDE 41.5GB \$4255  
IDE 41.6GB \$4265  
IDE 41.7GB \$4275  
IDE 41.8GB \$4285  
IDE 41.9GB \$4295  
IDE 42.0GB \$4305  
IDE 42.1GB \$4315  
IDE 42.2GB \$4325  
IDE 42.3GB \$4335  
IDE 42.4GB \$4345  
IDE 42.5GB \$4355  
IDE 42.6GB \$4365  
IDE 42.7GB \$4375  
IDE 42.8GB \$4385  
IDE 42.9GB \$4395  
IDE 43.0GB \$4405  
IDE 43.1GB \$4415  
IDE 43.2GB \$4425  
IDE 43.3GB \$4435  
IDE 43.4GB \$4445  
IDE 43.5GB \$4455  
IDE 43.6GB \$4465  
IDE 43.7GB \$4475  
IDE 43.8GB \$4485  
IDE 43.9GB \$4495  
IDE 44.0GB \$4505  
IDE 44.1GB \$4515  
IDE 44.2GB \$4525  
IDE 44.3GB \$4535  
IDE 44.4GB \$4545  
IDE 44.5GB \$4555  
IDE 44.6GB \$4565  
IDE 44.7GB \$4575  
IDE 44.8GB \$4585  
IDE 44.9GB \$4595  
IDE 45.0GB \$4605  
IDE 45.1GB \$4615  
IDE 45.2GB \$4625  
IDE 45.3GB \$4635  
IDE 45.4GB \$4645  
IDE 45.5GB \$4655  
IDE 45.6GB \$4665  
IDE 45.7GB \$4675  
IDE 45.8GB \$4685  
IDE 45.9GB \$4695  
IDE 46.0GB \$4705  
IDE 46.1GB \$4715  
IDE 46.2GB \$4725  
IDE 46.3GB \$4735  
IDE 46.4GB \$4745  
IDE 46.5GB \$4755  
IDE 46.6GB \$4765  
IDE 46.7GB \$4775  
IDE 46.8GB \$4785  
IDE 46.9GB \$4795  
IDE 47.0GB \$4805  
IDE 47.1GB \$4815  
IDE 47.2GB \$4825  
IDE 47.3GB \$4835  
IDE 47.4GB \$4845  
IDE 47.5GB \$4855  
IDE 47.6GB \$4865  
IDE 47.7GB \$4875  
IDE 47.8GB \$4885  
IDE 47.9GB \$4895  
IDE 48.0GB \$4905  
IDE 48.1GB \$4915  
IDE 48.2GB \$4925  
IDE 48.3GB \$4935  
IDE 48.4GB \$4945  
IDE 48.5GB \$4955  
IDE 48.6GB \$4965  
IDE 48.7GB \$4975  
IDE 48.8GB \$4985  
IDE 48.9GB \$4995  
IDE 49.0GB \$5005  
IDE 49.1GB \$5015  
IDE 49.2GB \$5025  
IDE 49.3GB \$5035  
IDE 49.4GB \$5045  
IDE 49.5GB \$5055  
IDE 49.6GB \$5065  
IDE 49.7GB \$5075  
IDE 49.8GB \$5085  
IDE 49.9GB \$5095  
IDE 50.0GB \$5105  
IDE 50.1GB \$5115  
IDE 50.2GB \$5125  
IDE 50.3GB \$5135  
IDE 50.4GB \$5145  
IDE 50.5GB \$5155  
IDE 50.6GB \$5165  
IDE 50.7GB \$5175  
IDE 50.8GB \$5185  
IDE 50.9GB \$5195  
IDE 51.0GB \$5205  
IDE 51.1GB \$5215  
IDE 51.2GB \$5225  
IDE 51.3GB \$5235  
IDE 51.4GB \$5245  
IDE 51.5GB \$5255  
IDE 51.6GB \$5265  
IDE 51.7GB \$5275  
IDE 51.8GB \$5285  
IDE 51.9GB \$5295  
IDE 52.0GB \$5305  
IDE 52.1GB \$5315  
IDE 52.2GB \$5325  
IDE 52.3GB \$5335  
IDE 52.4GB \$5345  
IDE 52.5GB \$5355  
IDE 52.6GB \$5365  
IDE 52.7GB \$5375  
IDE 52.8GB \$5385  
IDE 52.9GB \$5395  
IDE 53.0GB \$5405  
IDE 53.1GB \$5415  
IDE 53.2GB \$5425  
IDE 53.3GB \$5435  
IDE 53.4GB \$5445  
IDE 53.5GB \$5455  
IDE 53.6GB \$5465  
IDE 53.7GB \$5475  
IDE 53.8GB \$5485  
IDE 53.9GB \$5495  
IDE 54.0GB \$5505  
IDE 54.1GB \$5515  
IDE 54.2GB \$5525  
IDE 54.3GB \$5535  
IDE 54.4GB \$5545  
IDE 54.5GB \$5555  
IDE 54.6GB \$5565  
IDE 54.7GB \$5575  
IDE 54.8GB \$5585  
IDE 54.9GB \$5595  
IDE 55.0GB \$5605  
IDE 55.1GB \$5615  
IDE 55.2GB \$5625  
IDE 55.3GB \$5635  
IDE 55.4GB \$5645  
IDE 55.5GB \$5655  
IDE 55.6GB \$5665  
IDE 55.7GB \$5675  
IDE 55.8GB \$5685  
IDE 55.9GB \$5695  
IDE 56.0GB \$5705  
IDE 56.1GB \$5715  
IDE 56.2GB \$5725  
IDE 56.3GB \$5735  
IDE 56.4GB \$5745  
IDE 56.5GB \$5755  
IDE 56.6GB \$5765  
IDE 56.7GB \$5775  
IDE 56.8GB \$5785  
IDE 56.9GB \$5795  
IDE 57.0GB \$5805  
IDE 57.1GB \$5815  
IDE 57.2GB \$5825  
IDE 57.3GB \$5835  
IDE 57.4GB \$5845  
IDE 57.5GB \$5855  
IDE 57.6GB \$5865  
IDE 57.7GB \$5875  
IDE 57.8GB \$5885  
IDE 57.9GB \$5895  
IDE 58.0GB \$5905  
IDE 58.1GB \$5915  
IDE 58.2GB \$5925  
IDE 58.3GB \$5935  
IDE 58.4GB \$5945  
IDE 58.5GB \$5955  
IDE 58.6GB \$5965  
IDE 58.7GB \$5975  
IDE 58.8GB \$5985  
IDE 58.9GB \$5995  
IDE 59.0GB \$6005  
IDE 59.1GB \$6015  
IDE 59.2GB \$6025  
IDE 59.3GB \$6035  
IDE 59.4GB \$6045  
IDE 59.5GB \$6055  
IDE 59.6GB \$6065  
IDE 59.7GB \$6075  
IDE 59.8GB \$6085  
IDE 59.9GB \$6095  
IDE 60.0GB \$6105  
IDE 60.1GB \$6115  
IDE 60.2GB \$6125  
IDE 60.3GB \$6135  
IDE 60.4GB \$6145  
IDE 60.5GB \$6155  
IDE 60.6GB \$6165  
IDE 60.7GB \$6175  
IDE 60.8GB \$6185  
IDE 60.9GB \$6195  
IDE 61.0GB \$6205  
IDE 61.1GB \$6215  
IDE 61.2GB \$6225  
IDE 61.3GB \$6235  
IDE 61.4GB \$6245  
IDE 61.5GB \$6255  
IDE 61.6GB \$6265  
IDE 61.7GB \$6275  
IDE 61.8GB \$6285  
IDE 61.9GB \$6295  
IDE 62.0GB \$6305  
IDE 62.1GB \$6315  
IDE 62.2GB \$6325  
IDE 62.3GB \$6335  
IDE 62.4GB \$6345  
IDE 62.5GB \$6355  
IDE 62.6GB \$6365  
IDE 62.7GB \$6375  
IDE 62.8GB \$6385  
IDE 62.9GB \$6395  
IDE 63.0GB \$6405  
IDE 63.1GB \$6415  
IDE 63.2GB \$6425  
IDE 63.3GB \$6435  
IDE 63.4GB \$6445  
IDE 63.5GB \$6455  
IDE 63.6GB \$6465  
IDE 63.7GB \$6475  
IDE 63.8GB \$6485  
IDE 63.9GB \$6495  
IDE 64.0GB \$6505  
IDE 64.1GB \$6515  
IDE 64.2GB \$6525  
IDE 64.3GB \$6535  
IDE 64.4GB \$6545  
IDE 64.5GB \$6555  
IDE 64.6GB \$6565  
IDE 64.7GB \$6575  
IDE 64.8GB \$6585  
IDE 64.9GB \$6595  
IDE 65.0GB \$6605  
IDE 65.1GB \$6615  
IDE 65.2GB \$6625  
IDE 65.3GB \$6635  
IDE 65.4GB \$6645  
IDE 65.5GB \$6655  
IDE 65.6GB \$6665  
IDE 65.7GB \$6675  
IDE 65.8GB \$6685  
IDE 65.9GB \$6695  
IDE 66.0GB \$6705  
IDE 66.1GB \$6715  
IDE 66.2GB \$6725  
IDE 66.3GB \$6735  
IDE 6



# WHAT A GREAT DEAL ON THIS...

# NEC

## 90MHZ PENTIUM

3 YEAR  
WARRANTY

1MB PCI  
VIDEO

QUAD SPEED  
CD ROM  
DRIVE

1 GB  
HARD DRIVE

16 BIT  
STEREO  
SOUND

28.8K FAX/MODEM  
WITH VOICE

8MB RAM

03007901 NEC P90

MONITOR NOT INCLUDED

# \$2699

## FUTURE SHOP

DISCOUNT SUPERCENTERS

**WE ACCEPT OUT-OF-  
TOWN PHONE ORDERS**

*Call your nearest Future  
Shop for details*











## Personal space: Gigabytes for the desktop

BY CHINESE DESIGN

The humble hard drive is perhaps one of the most underrated components of personal computers. Flip through the pages of any publication dealing with computer technology and the chance of finding an article on hard drives is minuscule at best.

But the hard drive has been and continues to be central to the operation and performance of the personal computer. Most drives hold the entire organized portion of "the desktop," in computer parlance.

To understand how the hard disk slows down your computer, remember what happens when you load your operating system or when you pump into your favorite word processor.

You need this data to let your information flow from phone to phone, and pass it to main memory (RAM) for processing in compatibility with the computer's processor and memory. The hard drive is that slow computer spends most of its time waiting for the hard drive to supply it with data.

Computers constantly write to and read information from hard disks for a variety of reasons, and in several different ways. The long and short of the computer system's reliance on hard drives is that a small performance difference between hard disks can have a tremendous effect on the overall performance of many computer systems.

Then a dash of the art computer with the best printers and a good complement of software and ROM would be price in long spins and profits if added with an idea. All right.

### Price/performance: Supercharging on the cheap

Seagate recently conducted tests upgrading hard disks in machines running Windows 95 and showed that, on average, installing a hard-disk upgrade is one of the most cost-effective performance boosts you can get for a computer system.

So let us list a common concern that you see in the market for a new hard drive. What if I told you that, by picking one brand of hard drive over another, your system could run 10 per cent faster in many operations? How about if I mentioned that there's no real price penalty in speed or "second sourcing"? Read on.

This survey takes a look at IDE integrated serial electronic hard drives. These are the drives that are found in most personal computers. IDE-based computer system manufacturers drive the innovation in IDE. However, Mac computer fans, they are not.



main flexibility and capacity they are clearly not targeted towards the vast majority of domestic users.

The advantages of a SCSI system over an IDE system are disallowing slowly EN drive, are pricing higher, and each formatted drive (EIDE) you can now easily install has down on one system.

Performance of IDE drives is also improving. Still the advantages of SCSI based drives and controllers will not soon be eclipsed by EIDE. We will give further discussion of SCSI drives and controllers for another day.

**Are longer worth a visitation?**  
Originally we had planned to look at X30 MB hard data but when we started talking to stakeholders we soon discovered that the "pure" X30 MB is a thing based and is being dropped in favor of the "bigger than 1-gig" data center.

He called all the players in the hard-disk locker and received a good selection of the most copies. Some players chose to send us items well over the 1 GB mark, and being the biggest team that we've ever put there through their years.

The owner of the "accidental" hard-drive supplier declined the offer as there is no extra in their drive, which wrongly is not clearly laid out to state that they don't have the right stuff.

Special thanks to the folks at Diabete for supporting several of the projects on this

nothing else that is healthy & common

According to Dataquest, a well-known high-tech market and research consulting company, more than half of the world's high-tech companies are expected to expand in 1994, with 30% expected to expand by more than 20%.

The Dataquest study further predicts that 25% of the world's high-tech products will be new in 1994, up from 22% in 1993. The history of the industry: For 1993, Dataquest's Quantum II study found sales with 22.2 percent of the market, followed by Seagate (19.3 percent).

**WIRELESS**  
Digital (14.7 percent), Intel (13.9 percent), Cisco (13.5 percent), IBM (12.2 percent) and Microsoft (12 percent)—leaving 10.4 percent for the rest of the market.

The balance of the market will almost certainly land in a delivery gap in 1996 as the merger between Jaguar and Coventry, announced Dec. 5, is finalized.

**The month's Lab**  
The set out to answer the question: What  
single subject is the most fun to read?  
Over 100 books were read and the results  
are in! The most fun to read was...

The two Lays typically go to great lengths to furnish readers with some form of road pricing on the items we review, but this month, we have good reason not to. The hard drive market is extremely competitive and prices have dropped significantly over the last

In the EMI market, only a few cars are separate, one brand from another. The biggest factor in price differentiation appears to be in where you buy the drive. A quick way of determining, in the Computer Paper chart, is to look at the price of a car in the same class, more than a \$50 difference in the same drive, which is more than the price difference between brands.

At the printing, it also came out this morning, expect to pay between \$110 and \$130 for a hard drive with a 1 GB capacity. This means less than 25 cents to 34 cents per megabyte. The larger hard drives (1.5 GB and 1.8 GB) are one per megabyte less within this window. Check local advertisements for the latest pricing.

Abstract

Cardinal, he refers to his childhood and how often he was to sit up a table like machine to see the world.

For the tests, each drive was installed and set up in the CMR through auto detection. All options pertaining to hard disk were set to AUTO. No testing was attempted on partitions. Though a segment of the modeling may speed construction, having nothing to measure performance, it seems fair to assume that most people prefer to let built-in wiring software do the job of optimizing performance.

The tests with the samples of the RAPID Gasflow Isolator were conducted with the correct assembly of 210A, pipeline cables removed.

Once the dryer was installed, the machine was lowered from a Dapple dolly. The dolly was fabricated using HSSR and then bolted with six permasize DCS paracaps equal to its maximum capacity. At the

benchmark program were run against the  
data to test their performance.

### The beneficiaries

The lack of getting an accurate reading of a hard drive's performance is a far less significant flaw. There seems to be a general lack of awareness on the part of users and methods to use for testing hard drives.

Taking the case of teaching down the





approaches and functions and you design more advanced specifications from the prime development and design characteristics, there are only a few noteworthy observations.

The IBM Desktop and the Quantum Parallel will take both types of power connector found to PCs (the standard connector or the parallel kind usually associated with 3.5-inch floppy drives).

The Seagate Desktop ST2100RA has a smaller form factor than the rest of the pack. At 15-inch high and 5-inch long, it is 25 inches wide and 11-inch shorter than today's

standard size drives—good for tight spaces.

The Western Digital Cx1400 came with a 40-page installation manual. We have seen many hard computer systems come with less documentation.

The tests described here have been in use, through various revisions, for a number of years. Qtech and Quantum can be distinguished from the others as IDE systems in no way in the tests.

For day-to-day use some of these tests as your computer is in operation or do now your notes complete and the potential for increasing

performance with a hard disk upgrade.

Remember that you need to think of the results for data throughput as relative to the machine on which the drives were tested. This is because data throughput is a measure of the drive and controller combination. This actual time is independent of the variables.

## The tests

### Current 3.5

Convert to an IDE hard-drive benchmarking utility written by Gary Kohnberger

**Networking**  
**IS CHILD'S PLAY.**

**Net 44**  
parallel port networking

**\$28**

Share your CD ROM drives, printers and hard drives, faster easier and less expensively than you've ever imagined. Net 44's parallel port networking plug-in opens the door to real time, play and play data transfer for up to 4 computers and two printers. Supports Windows 3.0 and NT/Windows 3.11 effortlessly so what are you waiting for? Order now! **1-800-958-9997**



Executive Products  
for 87 January 1993

Suite 120 - 12871 Commerce Parkway, Richmond, BC Canada V6V 2R2  
Tel: (604) 276-0800 • Fax: (604) 276-0812 • Visit our URL: <http://www.actlab.com>

This test is freely available as the Internet and mentioned by name in a reasonably and impartial test of hard drives. As of version 3.00, Com International claimed there were over million cycles in one small test. Com International's claims of performance.

Here we have included the statistics from the testing suites. These are:

- **Buffered read rate:** This test reads the drive cylinder sequentially for 100,000 bytes. This test should indicate the maximum transfer or "burst" rate possible, above the drive will actually be transferred from the cache. The higher the number, the better the rate.
- **Average seek time:** This is calculated as the average time it takes for a full stroke across the platters by the read heads to reach the next track.
- **Track to track rate:** This is the time it takes to move the head from the outside track to an adjacent track.
- **End-to-end transfer:** This is the calculated overall statistics of the given computer configuration. An index of two is twice as fast as an index of one.

This benchmark gives a light feel place to the performance, closely followed by the Seagate and HP SureDisk drives. In part, these drives

may be due to the cylinder-buffered rate. Com International developed with SCSI drives in mind and puts a lot of emphasis on the measurement.

The average seek times listed here will be different story, with the Western Digital and the August, using 100 and second place and the 1.0 GB hard drive ranking at third place.

The really interesting results from this benchmark are the data rates. Here we see that the 1 GB Com and Western drives are given similar ratings. While we may note that neither drive has a terrific comparison of read and write, here always there is a gap you may it is hard to imagine that this performance is actual as reported.

The benchmark could not complete its operation on the 1 GB Com which is apparently due to the statistic in which the cache is implemented on the drive.

### Qtech

Including this hard-drive benchmark program is controversial as it written by Qtech, one of the members of the Council. Let's face it. Despite the fact that human nature (Q), we are skeptical of human claims. Qtech, we are skeptical of a Qtech claim that we must be skeptical of a Qtech claim's performance on this test, it does seem to be one of the few drives hard drive manufacturers deny results.

The test gives two statistics, data transfer rate and data access time.

The data transfer rate, as defined in Qtech, is the rate in which data is transferred over a bus. This has been assumed. Data transfer rate is simply dependent and the only is understood in terms of the machine that the benchmark is being run on.

Data access time is the most interesting hard-disk performance measure and is independent of the system the benchmark is run on. It is the weighted average of individual access times for sequential and random, multi-head operation.

To be more specific, the Quantum Parallel and High in both rates measured by this benchmark. The Prodrive took top spot in data transfer rate by a good margin, followed by the Western Digital and the Ultra Desktop.

Former, the Quantum was defined on its home ground in data access time by the







## IS YOUR LASERJET PRINTER TIRED?

- ◆ Does it groan, squeak, whine or even clank?
- ◆ Is the print quality 100% of what it should be?
- ◆ Does the paper ever jam or slip?
- ◆ Is your printer dirty?



## WE MAKE OLD PRINTERS FEEL NEW!

Your Laser Printer was designed to last a long time (most duty cycles are at least 350,000 pages), but it requires some TLC along the way. Minor parts will wear due to use, heat and even time. Those seemingly insignificant parts can cost you significant dollars in repairs and down time. Do yourself and your printer a favor by rejuvenating it with our **Preventative Maintenance & Cleaning program!** Quality Workmanship Performed with Pride and Integrity by Factory Trained Technicians!

## 4 GREAT NEW PROGRAMS

Onsite or Depot Service Available!

- ◆ LIGHT PM & CLEANING
- ◆ TOTAL PM & CLEANING
- ◆ TOTAL PM & WARRANTY

With a Light PM & Cleaning starting at only \$99.00 (depot service) including over \$50.00 in free parts and a Total PM & Cleaning starting at only \$179.00 (depot service) including over \$100.00 in free parts, it's a service that you can't afford not to have. Call 685-2737 for complete details on this and our other services.

## SAVE ON LASER

Service & Supplies for LaserJet Printers

55 East 8th Ave., Vancouver, BC

## WE GUARANTEE ALL OUR SERVICES

Call 685-2737 or Fax 874-2737

For Complete Details!

## Hard Drive Terminology

BY CHRIS FISHER

As it has happened to the rest of storage technology since the late '80s, the Compact Drive took a serious look at hard drive fly-back in the summer of 1995. That winter had a right boogie going and detailed with momentum it was to escape level disc using the digital channel. But the terminology captured within hard drive is no simple case of clear content, messy and misleading in the end user's eye. Hard drive is a little like a car and chassis don't ever believe. Computers can now easily support up to four IDE drives and there are a host of new drives, such as CD-ROMs, that can be attached to the IDE bus. These days, however, and the gradual attack of technology, have created a wealth of hard drive terminology and you yourself it remember. Here are a few of the more popular and technical terms associated with hard drive, to bring you up to speed. Many of these have been around for a long time, but some of them are quite new.

**ATA and IDE** IDE is an acronym for Integrated Drive Electronics. This was developed by Intel and has been integrated directly into the bus that most PC drives work with. IDE is actually built into the drive. IDE supports 330 and 400MB/s of data transfer, single channel and multi-channel. ATA is a single channel ATA which means by "Advanced Technology Architecture" is another acronym for IDE. ATA 2 is an extension of the original ATA standard that adds more PIO and DMA data. The ATA-2 specification also improves the timing and flow of data, allowing developers to use the drive faster. Finally, the standard introduced LBA addressing. ATA 3 is the current standard in the works — at the time of this writing it includes enhanced security and possibly some minor performance tweaks.

**ATAPI** (Advanced Technology Attachment Packet Interface). This is the standard that makes it easy to connect CD-ROM drives and other devices to an IDE interface.

**Block** A sector or a group of sectors.

**Caching** File memory that is used to optimize data transfers. Hard drives have their own cache memory built into the drive.

**Cylinder** Hard drive disks contain data organized on top of each other. If you view a top-down view through the disk, all the tracks located down the axis of the disk are called a cylinder.

**Data channel** Memory access inside. This area means that information is passed between a device and memory without the use of the CPU. New hard disks support Multibit DMA modes 1 and 2, which allow information to be passed in 15.3 and 16.6 MB/s.

**DMA** DMA stands are not considered as important as PIO modes (see below) due to a general lack of support at both the hardware and software levels.

**IDE** Integrated Drive Electronics. This term applies between IDE and IDE drives as well as IDE, LBA addressing, CD-ROM drives,

and connections of four disks to your computer. IDE has become a catch all phrase for the changes that have happened in the hard drive industry and is based on two standards: ATA 2 and ATAPI. The two standards have different benefits at the time of writing and support. When you are buying a product that is IDE, it is difficult to determine exactly what it is you are getting. The terms IDE ATA and IDE ATAPI have not yet been fully standardized. These terms are similar to IDE but only encompass the ATA-2 standard.

**Enhanced IDE** This is a BIOS that supports drive bigger than 320 MB, which was the maximum supported size for an IDE drive a little over two years ago. An Enhanced IDE can be installed on a system to perform better when the drive is used for hard disk access. It is also used on any type of BIOS that supports IDE. Windows 3.11 or Windows 95, you need an Enhanced IDE to support drive larger than 320 MB.

**Landing** The delay between when the head is moved to a track for a read or data and when the head of the disk starts to read in the open where it can't be read. The delay is the time the head is in the air and the head is in the air.

**LBA** Logical Block Addressing is a method of addressing the hard drive. It was introduced in IDE drives with the ATA-2 standard. This is the same addressing mode used with IDE drives. A large translation where can be used to address the hard drive. The LBA mode is used to address the hard drive. The LBA mode is used to address the hard drive.

**MTBF** Mean Time Between Failure. This is the expected failure rate of the drive in terms of the number of hours that it is on. On average, hard drives have MTBF ratings of 300,000 hours which translates to over 34 years.

**PIO** Programmed Input/Output Interface. PIO mode determines transfer rates to and from the drive. PIO modes currently range from PIO 0 to PIO 4. PIO modes are used to transfer data to and from the drive. PIO modes are used to transfer data to and from the drive. PIO modes are used to transfer data to and from the drive.

**Prevent** A disk made of a different material that is used to prevent a disk from being damaged. The disk is made of a different material and is used to prevent a disk from being damaged. The disk is made of a different material and is used to prevent a disk from being damaged.

**Reiser** In the world of PCs, the Reiser is the most common method of a track that can be repaired to prevent information.

**Seek** A magnetic magnetic probe or the disk's surface. There is a guide for the disk's surface. There is a guide for the disk's surface. There is a guide for the disk's surface.

**Time to Read** The time it takes for the disk to read a byte of data. The time it takes for the disk to read a byte of data. The time it takes for the disk to read a byte of data. The time it takes for the disk to read a byte of data.

# Hard disk installation 101

BY CHRIS FISHER



We pay more for larger, bigger than the make and model of your computer and also be prepared to pay more. It costs just as much as \$10 to get a set for a Compaq — each. If you don't or can't get the correct matching drive, your only recourse may be to wait and replace yours.

The second thing you will need to check is your first drive. If you are adding a second hard drive, ensure that it has a power connector to accommodate it and that the connector will match the empty bay that will house it. Many—but not all—new hard drives come with the latter items included.

If you are adding a second drive to the system, you will need a second power cable. If there is not a line in your computer you can purchase a Y adapter that splits one power cable into two. Again, these can be purchased for around \$10 and a local dealer will be able to help you.

Finally, if you are installing a hard drive it is greater than 528 MB you will need to ensure that you have an enhanced BIOS in your computer to take advantage of the extra capacity. If you are not sure whether your BIOS is enhanced, consult the manual that came with your computer. Look at the list of features that the manufacturer, Packard and many other manufacturers will place outside of the enhanced BIOS. A machine that is expending its second year of service may or may not have this option.

If you do not have an enhanced BIOS, you can use the software down the other company's new drive to trick your computer into using the extra space. Drive options are to obtain a BIOS upgrade or to purchase a disk drive controller that has an enhanced BIOS on board.

## Before you lift that second drive

Back up your existing hard drive. All you need to back up is the documents and applications that you have created. Backing up everything on a large hard drive can be tedious. If you do not have a high-capacity backup system, it doesn't matter, you can always restore programs from the original disks, but restoring your new work may mean starting all over.

Think about what you have on the computer carefully. It is easy to forget to back up many items such as your EMail database or your Internet browser's preferences. Back up before you start the job. If you start the job, you start the job of upgrading your system. It is not a trivial job. It is a long and wonderful thing to complete. As long as you have a backup, no matter what happens, all is not lost.

Remember that you have a bootable floppy disk and all the other necessary to get an operating system back on your computer. If you are installing a new drive to hold the operating system, you will need to be able to boot your system from a floppy drive. Even if

you are installing an additional hard drive, it is a good idea to have a bootable floppy on hand. You may want to copy several utilities to this disk to help get the hard drive up and running. The floppies I use contain the DOS utilities CHKDSK, FDISK, FORMAT, SCANDISK and the CHKDsk.

## Need a new controller?

If you are adding a new drive that supports PIO mode 3 or 4 and your existing hardware does not support that mode, installing it is a headache. It is a good idea. That will enable you to get the best performance from your best drive. A new controller that supports these modes is not overly expensive — typically under \$15. They are available for the VLSI PCI bus.

We suggest that if you are buying a new drive and your existing controller does not support it, you should get a new one. Any local computer dealer should be able to point you in the right direction. IDE controllers are also available. Compaq and Packard, that allow older computers with ISA buses to support features of IDE drives. Only in the last couple of years have computers begun to support capabilities greater than SMART. Generally, these controllers are used to get around this limitation — higher transfer rates are not supported due to the restrictions of the ISA bus.

## LOW COST. HIGH PRODUCTIVITY.



**SHARP JX-9210** Crisp 600 dpi Laser Printer for Windows™  
**JX-9200** Crisp 300 dpi Laser Printer for Windows™

For more information, please call



**A&L ELECTRONIC** Tel. 5040 279-0718



The JX-9200 and JX-9210 both incorporate the Microsoft® TrueType Printing System (WYS) in their design. The second advantage of this system is it allows your personal computer to do all of the computer work while a really slow by the power's controller. WYS accomplishes this by sharing its processing work between the printer and the personal computer. The result is that the printer and the PC function as one.

Highly integrated system. TrueType can be managed directly on the printer from your computer. This allows the printer to keep the data concerning each command between the PC and printer, which also allows the speed of your printing. The benefits to you is a quick completion of the print job and a fast return to applications.

- Small footprint and lightweight design
- Microsoft Windows™ Printing System (WYS)
- For high-speed laser printing with Windows™
- Easy-to-use with a friendly GUI
- Fast return to menu and quick first page print
- With Microsoft TrueType Technology
- High-quality 600-dpi printing at 4/4ths (JX-9210)
- High-quality 300-dpi printing at 4/4ths (JX-9200)
- 100-sheet dual-purpose paper tray
- Manual cover when not printing
- No wasted toner with
- TrueType Recycled Technology
- Choice-free printing and low power consumption

Microsoft, Windows and the Windows logo are registered trademarks of Microsoft Corporation.



### Should you keep your old drive and add a new drive?

Older drives should work fine on A2+ hardware, as drive controller adapters have enough intelligence to realize that you are using an older drive. However, some controllers could cause data corruption when the leading FPD mode with the drives. Additional problems associated with using an ATA drive as a primary drive in an EIDE system is that interrupts incapable of using independent timings for each drive will drag back to the lowest common denominator and cause your new drive to operate at less than its optimum. Personally, if I were building a 1 GB hard drive into a system with a 250 MB or less hard disk, I would pull the latter out.

### Masters and Slaves

In an IDE configuration, each channel needs to have a master and a slave drive. If you're adding a new drive and it will be the only drive in the system, then the drive needs to be set as the master. It is essential for a new drive to be set as master by default so in this case you need a jumper.

If, however, your new drive will be the second drive in a system then one of the drives needs to be set as slave. This is accomplished by setting the appropriate jumpers on the drive. Also you will need to format the drive and the partitions that reside on the drive. At the master drive on the primary IDE channel (drive C:) typically does the most work by virtue of housing the operating system. You will want to set the master or biggest drive you have in master on the channel.

If you are installing a third drive on the second channel on an EIDE system, you would need to set the drive as master. A fourth drive would be set as slave.

### The Installation

Some sources of information, including the hard drive installation process that suggest that you unplug the computer before you start. I suggest the opposite: do not unplug the machine, but make sure that it is totally off and that you will not turn it on accidentally due to the installation of the drive. This keeps the computer grounded and isolates the chance that you will discharge damaging static electricity into any of its sensitive components. Many computer components can be damaged or destroyed by static discharge, which is why your drive arrived in an anti-static bag. During the process of installation, try not to handle the device exposed circuit board.

A general tip for upgrading a computer is to always make sure that you can back up. Take notes if you have to do long as you know exactly what you have done so you are in their danger as you can always get the system back to the way it was and ask help.

Actually installing the drive is simple. First, attach mounting brackets to the drive, make sure that the screws are not too long and do not touch or poke in. I prefer to pre-align the circuit board underneath the drive so it can rest in a mass-produced form. A little case I have found might be adequate, however, the drive will be kept where it will have to be useful. Also, make sure to place the wire holes in the drive tray in the mounting bracket.

Now, turn the ribbon cable. Make sure that one side has a red strip as drive electronic matching. This indicates that a green pin side on the drive. The red strip will usually go next

to the power connector on the drive. You will also likely be situated on the drive and should also be detailed in the manufacturer's data sheet with the drive. Plug it in by either drive you will be using on the channel and plug the other end into the controller. The controller also has a pin and lead the connector. The ribbon cable should be aligned with the red strip to the left of the drive and the controller.

All that remains now is to plug the power connector into the drive. Now comes filling

in data. Turn on the computer and go into the CMOS setup by pressing DEL or F1, or, increasingly, something else—watch the screen for the phrase "Press [key] to enter CMOS" or "to enter setup" or some as the computer is started.

This is given you access to where the computer stores vital information, so we have to make sure you set up the CMOS to your new drive. Set the hard drive parameters for your new drive. Assuming you have an enhanced BIOS you just state the heads (3 heads) and sectors that your drive has.

This information can be found in the documentation that came with the drive or on the back of the drive itself. In cases where you will not need to enter any information—just look for a label that says "hard drive" or "IDE" or "EIDE" and if everything is hooked up into the system and it will be nearly how to fill in the information for you. If it is well, your new hard drive should be ready for installation and formatting. The procedure here differs depending on what operating system you are using, so we need to leave that to the documentation. □

## Express Yourself

Sign up on the web and get 3 months for the price of 2!

**\$18.95**

Per month  
**Flat Rate**

Free Setup • No Access Software Delivered  
100% Virtual • Attached to Your Computer

**INTERNET EXPRESS**

Call: **331-INET (4638)**

E-Mail: [sales@express.ca](mailto:sales@express.ca)  
<http://www.chpress.ca/>

**ISDN-Express**

**8 times faster than regular ISDN**

from **\$39.95**

per month  
**Dial Up ISDN**

from **\$395**

per month  
**Dedicated Line**



# Professional assistance for job hunters

BY MARTIN P. WATERMAN

## ResumeMaker Deluxe CD

Perf. Industrial Software

Requirements: Windows 3.11 or higher or Windows 95 (provided you have a Windows 95 or later version), 1 MB RAM, system - at least 20-MHz drive, VGA video adapter or higher, and a hard disk. Download price: \$20

**R**esumeMaker Deluxe CD is found at the best selling software stores with career planning, but I was skeptical about its claims to be the most powerful system of products to use. Individual and business resumes are very good, while others

have you wondering how a company could make such an already buggy or obscure program.

Of course, being in New Brunswick where jobs are scarce, the employment of a program that made the bold promise of being able to "get you the job."

ResumeMaker was not high on my list of programs to review until a friend who recently graduated from business college, saw it on my shelf. As I now had a palmtop, we put the product through its paces.

I owned ResumeMaker on two machines, the first of which was a Pentium 200 with 16 MB RAM and a double-speed CD-ROM drive.

It worked well, but even with all this speed, the video had trouble displaying the long and long offers in his audio, often in the middle of sentences. This was disappointing, but because the email interview was one of the new features of this program.

In the email interview job hunters are provided with numerous questions they are likely to face in an interview. They are also given the suggested answers, and the candidate behind those responses. The answers even provide suggestions questions, so job hunters can be prepared for any interview. I particularly like the resume that deals with salary negotiation, workplace environment and other topics that are difficult, but also come up during an interview.

On the plus side, the program offered excellent resume and confidence builders for the job seeker. Including a step-by-step guide to creating a resume using a wide selection of formats, terms and focus. Richard Ross, an author who also offers job-hunting workshops, covered 50 essential topics for finding a career at ResumeMaker.

The program includes a section on cover letters. Cover letters can be difficult too, by choosing appropriate phrases by experts, job seekers can overcome the difficulty many people have putting their thoughts down on paper.

The contact manager allows the job seeker keep track of their contacts, including company responses, addresses and appointment. A cover letter is also included.

My friend used ResumeMaker and is using it in his job search. She has written up her resume in the program (which includes a word processor) and saved it with the address of prospective employers.

She said ResumeMaker has not been her best thing, but she likes the best job-seeking strategies, which include the Internet.

"A lot of use, but I really like it," she said. Greg, the site's technical support, she is recommending the product to one of her business college students as a teaching aid for a module that includes resume courses and job hunting.

With the exception of the video problems, which were more annoying than anything else, I also liked the program because of its thoroughness in preparing the user for job hunting.

However, ResumeMaker does not have an unconditional guarantee, nor does it come with a bulletin board or a purchase of a book for someone who purchases software. G

Professionally Designed **Web Site** on  
Canada's Largest Business Directory

From **\$99.00** Annual Fee

The advantages for your business are endless

- Provide information about your products and services
- Publish your catalogues
- Take customer orders and research your market online
- At \$99 a year, there are simply no equals

602-9564

**Web Express**

Canada's only national Web site developer

<http://web.express.ca/> Tel: 1-800-788-4555

Contact: Industrial Software 1-800-021-0212





THE PEOPLE'S WAITING AT  
**Versatile**

SINCE 1984  
VANCOUVER • TORONTO • NEW YORK

## COMPUTER

- Sales
- Service
- Rentals
- Repairs
- Upgrades
- Leasing

LENS \$75.00

NEW ADDRESS -  
SAME GREAT SERVICE  
sales@veracitycomputers.com

## COMTEX 95 WINPAC



Herman 73  
 NJ Waterboard  
 SE-471, 480p  
 1498 EDO Lake  
 254 Knobs  
 344 FDO  
 Laid-HDD  
 FO HAD 1/8  
 Diamond South PO  
 wife w/2ND FDO  
 CO. 171-5454, N.

East: \$499  
 25.6" True/realistic  
 w/ frame  
 Dual Speed CD-ROM  
 15" internal and  
 external keyboard  
 MS (256K) mouse  
 Windows 95  
 MS CD-ROM bundle  
 Total

51.90



**CONTRIBUTOR**

**EPSON**

HEWLETT  
PACKARD

**VCS Canon**



**NEW ADDRESS**

**242 EAST 2ND AVE.**  
Tel: 875-6400 • Fax: 875-6409  
Phone: 1-800-443-7863



Articles published in 4 vols. since 1990

VCS MULTIMEDIA

Pentium 90  
 PC Motherboard  
 386 RAM  
 254K cache  
 Min-tower case w/200w PS  
 1 44.700  
 Quad-Mc (3-800)  
 16-in screen and  
 Real speakers  
 1 300.000  
 Network Keyboard

14" H Box/modern w/valve  
14" SPINA RE Low-Radiation  
model  
70 valves w/1.88  
MS C30 valve 1" valve  
Send more and 1st  
MS D06 V6 22  
**\$2399**

PRINTED

[illegible]

100

#### MISCELLANEOUS

1 N8 State 1200  
400 State 1000  
1 N8 State 1000  
1 N8 State 1000  
Cancer 1000 To  
Rhine Coal 1000  
Rhine 1000 To  
Rhine 1000 To  
Rhine 1000 To  
Rhine 1000 To  
Rhine 1000 To

72 psi	51
72 psi	51
72 psi	52
72 psi	52
Black-By	53
CS 8282	52
Acetone	54
	54
	52
	52

## Aptiva. IBM

- Reliability & quality you can use and depend on
- Easy to learn and use for the whole family

[illegible]

**Odyssey A90**  
\$5249.00  
with 15.4" LCD screen, 640



1. **CONTRACTING**  
 2. **ART 1000**

[illegible]**CableTel** [www.AuthorityCenter.com](http://www.AuthorityCenter.com)

File name for Capital & CT Catalog: 11500.pdf

Available 40 Tel. Available 40 Tel.

**BLOWOUT SPECIAL**

[illegible]RENT  
LEASE  
UPGRADES

JASCOM COMPUTERS INC.

Tel: (604) 275-6912 • Fax: (604) 275-6990

Prices and quality may change without notice. All prices FOB Richmond, Louisiana. Extra

**NETWORKING  
TRAINING  
SUPPORT**













The image shows the cover of the 'canTax71' software box. The title 'canTax71' is at the top in a stylized font. Below it, 'Personal Income Tax Software' is written. The cover features a graphic of a highway with cars, suggesting a fast and easy process. A small 'can' logo is in the bottom right corner.

**Costello  
home  
with  
HOMETAX!**

HomeTax lets you do your tax returns easily, quickly and accurately and is filled with great tax tips from Brian Costello to help you really make the most of your tax dollar. Even if you've never done your taxes before, HomeTax will help you produce a perfect return in no time.

HomeTax has more than 140 Federal & Provincial forms (250 in Quebec TPI version) built right in, and can make you through your return step by step, taking advantage of every allowable deduction.

The original HomeTax "What if?" feature lets you examine different scenarios for filing your returns to determine which strategy saves you the most.

HomeTax will print out your returns on Revenue Canada approved forms. All that's left for you to do is sign and drop them in the mail!

Take Brian Costello's HomeTax home with you and take the hassle out of preparing your tax return.

**BONUS  
INSIDE**  
10 Years of  
**Tax  
Tips '95**

**HOMETAX**  
FOR QUEBEC

CD-ROM Windows  
DOS  
Macintosh



## The book was so good it's been turned into 150 movies.

Manual Finance has become the ultimate strategy of choice in the industry. The new Top Funds accounts, multiplatform, CD-ROM, you like to be on the cutting edge, you need to add depth research, and precision. A new publication, 4th edition, presents a picture of Canada's top 150 mutual funds. The new Top Funds: Builder in color, 4 color page booklet. Bring you a new dimension of mutual funds in full color that shows you. The other's color, mutual fund experiences, you and



150+ top funds and 150+ top funds (150+ top funds and 150+ top funds)

150+ top funds and 150+ top funds (150+ top funds and 150+ top funds)

**GREENPOINT**  
Software Ltd.

150+ top funds and 150+ top funds (150+ top funds and 150+ top funds)

Order today: 1-800-452-9970

## SMILE! IT'S TAX TIME AGAIN.

With Vision Tax 95, the award-winning, user-friendly Income Tax software package, filing a return could actually bring a smile to your face.

- ✓ The only tax software that displays tax forms and slips just like the ones you receive
- ✓ Produces an unlimited number of returns
- ✓ An unequalled performance and reliability
- ✓ Integrated expert tax advice
- ✓ Complete technical support
- ✓ Windows 95™ Compatible
- ✓ Chosen by the Computer Paper as the 1994 Editor's Choice



On a 3 1/2" floppy disk, department and computer stores. (CD-ROM or diskette)

For information, call toll-free 1-800-443-2127

Our personal finance and Vision Tax... which let's you manage your money and more... with a touch of Vision. With the help of our award-winning software, you can manage your money.

Book Hillman, THE COMPLETE FUTURE, March '95



Our Internet site: <http://www.dolmen.com>



Two items were included: a statement, followed by a list of all the tax items that should be filed along with your return.

The program then filling out without the need for entering dozens of numbers and calculations. The program then filling out without the need for entering dozens of numbers and calculations.

Carlson has all the features you would expect from a professional program. It has a powerful diagnostic function, and a powerful planning tool. It can easily find your way, page or line, to any part of the program.

As with such programs, Carlson has a powerful tool and report to help you find your way. It can easily find your way, page or line, to any part of the program.

As well, the Windows program will make the most of your computer's power. It can easily find your way, page or line, to any part of the program.

Carlson has all the features you would expect from a professional program. It has a powerful diagnostic function, and a powerful planning tool. It can easily find your way, page or line, to any part of the program.

As with such programs, Carlson has a powerful tool and report to help you find your way. It can easily find your way, page or line, to any part of the program.

As well, the Windows program will make the most of your computer's power. It can easily find your way, page or line, to any part of the program.

Carlson has all the features you would expect from a professional program. It has a powerful diagnostic function, and a powerful planning tool. It can easily find your way, page or line, to any part of the program.

As with such programs, Carlson has a powerful tool and report to help you find your way. It can easily find your way, page or line, to any part of the program.

As well, the Windows program will make the most of your computer's power. It can easily find your way, page or line, to any part of the program.

Carlson has all the features you would expect from a professional program. It has a powerful diagnostic function, and a powerful planning tool. It can easily find your way, page or line, to any part of the program.

As with such programs, Carlson has a powerful tool and report to help you find your way. It can easily find your way, page or line, to any part of the program.

As well, the Windows program will make the most of your computer's power. It can easily find your way, page or line, to any part of the program.

Carlson has all the features you would expect from a professional program. It has a powerful diagnostic function, and a powerful planning tool. It can easily find your way, page or line, to any part of the program.

As with such programs, Carlson has a powerful tool and report to help you find your way. It can easily find your way, page or line, to any part of the program.

As well, the Windows program will make the most of your computer's power. It can easily find your way, page or line, to any part of the program.

Carlson has all the features you would expect from a professional program. It has a powerful diagnostic function, and a powerful planning tool. It can easily find your way, page or line, to any part of the program.

As with such programs, Carlson has a powerful tool and report to help you find your way. It can easily find your way, page or line, to any part of the program.

As well, the Windows program will make the most of your computer's power. It can easily find your way, page or line, to any part of the program.

Carlson has all the features you would expect from a professional program. It has a powerful diagnostic function, and a powerful planning tool. It can easily find your way, page or line, to any part of the program.

As with such programs, Carlson has a powerful tool and report to help you find your way. It can easily find your way, page or line, to any part of the program.

As well, the Windows program will make the most of your computer's power. It can easily find your way, page or line, to any part of the program.

Carlson has all the features you would expect from a professional program. It has a powerful diagnostic function, and a powerful planning tool. It can easily find your way, page or line, to any part of the program.

As with such programs, Carlson has a powerful tool and report to help you find your way. It can easily find your way, page or line, to any part of the program.

very complete manual.

The program has been put together by someone who knows how to make a manual program.

The program has been put together by someone who knows how to make a manual program. The program has been put together by someone who knows how to make a manual program.

The program has been put together by someone who knows how to make a manual program. The program has been put together by someone who knows how to make a manual program.

The program has been put together by someone who knows how to make a manual program. The program has been put together by someone who knows how to make a manual program.

The program has been put together by someone who knows how to make a manual program. The program has been put together by someone who knows how to make a manual program.

The program has been put together by someone who knows how to make a manual program. The program has been put together by someone who knows how to make a manual program.

The program has been put together by someone who knows how to make a manual program. The program has been put together by someone who knows how to make a manual program.

The program has been put together by someone who knows how to make a manual program. The program has been put together by someone who knows how to make a manual program.

The program has been put together by someone who knows how to make a manual program. The program has been put together by someone who knows how to make a manual program.

The program has been put together by someone who knows how to make a manual program. The program has been put together by someone who knows how to make a manual program.

The program has been put together by someone who knows how to make a manual program. The program has been put together by someone who knows how to make a manual program.

The program has been put together by someone who knows how to make a manual program. The program has been put together by someone who knows how to make a manual program.

The program has been put together by someone who knows how to make a manual program. The program has been put together by someone who knows how to make a manual program.

The program has been put together by someone who knows how to make a manual program. The program has been put together by someone who knows how to make a manual program.

The program has been put together by someone who knows how to make a manual program. The program has been put together by someone who knows how to make a manual program.

The program has been put together by someone who knows how to make a manual program. The program has been put together by someone who knows how to make a manual program.

The program has been put together by someone who knows how to make a manual program. The program has been put together by someone who knows how to make a manual program.

The program has been put together by someone who knows how to make a manual program. The program has been put together by someone who knows how to make a manual program.

The program has been put together by someone who knows how to make a manual program. The program has been put together by someone who knows how to make a manual program.

The program has been put together by someone who knows how to make a manual program. The program has been put together by someone who knows how to make a manual program.

The program has been put together by someone who knows how to make a manual program. The program has been put together by someone who knows how to make a manual program.

The program has been put together by someone who knows how to make a manual program. The program has been put together by someone who knows how to make a manual program.

The program has been put together by someone who knows how to make a manual program. The program has been put together by someone who knows how to make a manual program.

The program has been put together by someone who knows how to make a manual program. The program has been put together by someone who knows how to make a manual program.

The program has been put together by someone who knows how to make a manual program. The program has been put together by someone who knows how to make a manual program.

The program has been put together by someone who knows how to make a manual program. The program has been put together by someone who knows how to make a manual program.



one of the best tax programs ever written, buy HomeTax. HomeTax, 14th Floor, 1400 Tower 2000, Metrotech Blvd. E., Mississauga, Ont. L4W 5G5. Tel: (905) 874-0000. Fax: (905) 874-8044. Web: <http://www.ontario.ca/~taxinfo>. Email: [canhelp@home.ca](mailto:canhelp@home.ca)

**QuickTax for Windows, QuickTax Deluxe for Windows, QuickTax for Macintosh, Import/Export** (checklist included). Please contact your nearest software retailer.

Price: Windows: Macintosh and Macintosh versions: \$29.95 — \$34.95. Deluxe version: \$39.95 — \$44.95.

QuickTax, formerly known as WinTax, is made by Intuit, the heavyweight in personal financial software in the U.S.

Generally, Intuit dominates both the personal-financial and the professional markets in the U.S., with more than eight million people using Quicken and 75 percent of tax software users buying TurboTax.

If you own a copy of Intuit's Quicken, you

will still see spreadsheet tools in TurboTax, even though it is the Canadian edition. Although the American market for this category of software is dominated by one player, the Canadian field is not nearly as competitive.

Intuit wants to change that and, to that end, has produced a high-quality product at a very good price.

QuickTax is an excellent program. The deluxe edition for Windows comes on a CD and costs a little more than \$40. A double-

# Take the Easy way out!



**Nothing compares to QuickTax. It's the easiest way to do your taxes. Guaranteed!**

## Easy

QuickTax includes everything you need to do your taxes including Revenue Canada approved forms (federal, provincial, schedules and worksheets). QuickTax also has the most comprehensive context-sensitive help system of any tax preparation program with interactive answers to your questions.

## Accurate

Special features like SmartAudit ensure that your return is accurate and complete while Deduction Finder will look for tax saving opportunities you might have overlooked. With QuickTax you can be confident that you're filing an accurate and complete return. So at year-end, relax and let QuickTax take on the burden of handling your tax preparation.

## Quick

With QuickTax there is no more number crunching, less pulling or frustration with completing your tax return. Just sit down at your computer with your records and receipts and let QuickTax's EasyTax™ system guide you through every step. Once complete, simply print out your forms on plain paper, sign them and mail them. It's that quick!

**Complete satisfaction. 100% Money-back guarantee!**

**WinTAX**  
Canada's #1 Windows  
Tax Software is now  
called QuickTax

**QuickTax**

Available wherever computer products are sold,  
or call 1-800-929-8166 ext. 311

Macintosh  
Version  
Available



## TAX TIME

The Macintosh version needs 2 MB of memory, a high-density floppy disk system, 6 or later OS.

The Israeli program slides smoothly into an introductory video clip from *Idnashell* (Loeb and Gross, Inc.). Loeb will be familiar to

On our test system (IBM-PC with 5 MB RAM), the small video clips and sound ran well, even to the point where it was some-

QuickTax offers both a linear and an interactive approach. The forms resemble the real thing quite well and are easily navigated.

One of the best features of Lanyard is the red circle that appears on the next item to be lifted out. It doesn't simply move your canoe to the new position. It is like having someone standing over your shoulder showing you exactly what to do.

44. KSI 34 features an QuickTax 4 ribbon (P4) key program and there is included IntelliMail, Definition Studio, extensive help, ImportExport, a "What If" feature, 1 KSI support, 1st summary window and

There are three other great books as well: *Ernst & Young's Warehouse Store Forecast Data*

There is more to say but no room to say it.

With the exception of the program's inability to be filed (that's a very little to complain about). The video clips are good, but as they must target the average user, they sometimes come across as comical.

Intuit has brought you a great tax program that is perfectly written for Canada and does everything that you could want. You can now go home with **QuickTax 1995**.

Contact: Innotek Canada Ltd., 44024 Gateway Rd.  
Brimley, Alta., T4C 0A7 Tel: 1-800-822-8161 ext.  
330 Fax: 1-879-324-8225  
Web: <http://www.innotek.com>

1992, 1993, 1994, 1995, 1996, 1997, 1998, 1999, 2000, 2001, 2002, 2003, 2004, 2005, 2006, 2007, 2008, 2009, 2010, 2011, 2012, 2013, 2014, 2015, 2016, 2017, 2018, 2019, 2020, 2021, 2022, 2023, 2024, 2025, 2026, 2027, 2028, 2029, 2030, 2031, 2032, 2033, 2034, 2035, 2036, 2037, 2038, 2039, 2040, 2041, 2042, 2043, 2044, 2045, 2046, 2047, 2048, 2049, 2050, 2051, 2052, 2053, 2054, 2055, 2056, 2057, 2058, 2059, 2060, 2061, 2062, 2063, 2064, 2065, 2066, 2067, 2068, 2069, 2070, 2071, 2072, 2073, 2074, 2075, 2076, 2077, 2078, 2079, 2080, 2081, 2082, 2083, 2084, 2085, 2086, 2087, 2088, 2089, 2090, 2091, 2092, 2093, 2094, 2095, 2096, 2097, 2098, 2099, 2100, 2101, 2102, 2103, 2104, 2105, 2106, 2107, 2108, 2109, 2110, 2111, 2112, 2113, 2114, 2115, 2116, 2117, 2118, 2119, 2120, 2121, 2122, 2123, 2124, 2125, 2126, 2127, 2128, 2129, 2130, 2131, 2132, 2133, 2134, 2135, 2136, 2137, 2138, 2139, 2140, 2141, 2142, 2143, 2144, 2145, 2146, 2147, 2148, 2149, 2150, 2151, 2152, 2153, 2154, 2155, 2156, 2157, 2158, 2159, 2160, 2161, 2162, 2163, 2164, 2165, 2166, 2167, 2168, 2169, 2170, 2171, 2172, 2173, 2174, 2175, 2176, 2177, 2178, 2179, 2180, 2181, 2182, 2183, 2184, 2185, 2186, 2187, 2188, 2189, 2190, 2191, 2192, 2193, 2194, 2195, 2196, 2197, 2198, 2199, 2200, 2201, 2202, 2203, 2204, 2205, 2206, 2207, 2208, 2209, 2210, 2211, 2212, 2213, 2214, 2215, 2216, 2217, 2218, 2219, 2220, 2221, 2222, 2223, 2224, 2225, 2226, 2227, 2228, 2229, 2230, 2231, 2232, 2233, 2234, 2235, 2236, 2237, 2238, 2239, 2240, 2241, 2242, 2243, 2244, 2245, 2246, 2247, 2248, 2249, 2250, 2251, 2252, 2253, 2254, 2255, 2256, 2257, 2258, 2259, 2260, 2261, 2262, 2263, 2264, 2265, 2266, 2267, 2268, 2269, 2270, 2271, 2272, 2273, 2274, 2275, 2276, 2277, 2278, 2279, 2280, 2281, 2282, 2283, 2284, 2285, 2286, 2287, 2288, 2289, 2290, 2291, 2292, 2293, 2294, 2295, 2296, 2297, 2298, 2299, 2300, 2301, 2302, 2303, 2304, 2305, 2306, 2307, 2308, 2309, 2310, 2311, 2312, 2313, 2314, 2315, 2316, 2317, 2318, 2319, 2320, 2321, 2322, 2323, 2324, 2325, 2326, 2327, 2328, 2329, 2330, 2331, 2332, 2333, 2334, 2335, 2336, 2337, 2338, 2339, 2340, 2341, 2342, 2343, 2344, 2345, 2346, 2347, 2348, 2349, 2350, 2351, 2352, 2353, 2354, 2355, 2356, 2357, 2358, 2359, 2360, 2361, 2362, 2363, 2364, 2365, 2366, 2367, 2368, 2369, 2370, 2371, 2372, 2373, 2374, 2375, 2376, 2377, 2378, 2379, 2380, 2381, 2382, 2383, 2384, 2385, 2386, 2387, 2388, 2389, 2390, 2391, 2392, 2393, 2394, 2395, 2396, 2397, 2398, 2399, 2400, 2401, 2402, 2403, 2404, 2405, 2406, 2407, 2408, 2409, 2410, 2411, 2412, 2413, 2414, 2415, 2416, 2417, 2418, 2419, 2420, 2421, 2422, 2423, 2424, 2425, 2426, 2427, 2428, 2429, 2430, 2431, 2432, 2433, 2434, 2435, 2436, 2437, 2438, 2439, 2440, 2441, 2442, 2443, 2444, 2445, 2446, 2447, 2448, 2449, 2450, 2451, 2452, 2453, 2454, 2455, 2456, 2457, 2458, 2459, 2460, 2461, 2462, 2463, 2464, 2465, 2466, 2467, 2468, 2469, 2470, 2471, 2472, 2473, 2474, 2475, 2476, 2477, 2478, 2479, 2480, 2481, 2482, 2483, 2484, 2485, 2486, 2487, 2488, 2489, 2490, 2491, 2492, 2493, 2494, 2495, 2496, 2497, 2498, 2499, 2500, 2501, 2502, 2503, 2504, 2505, 2506, 2507, 2508, 2509, 2510, 2511, 2512, 2513, 2514, 2515, 2516, 2517, 2518, 2519, 2520, 2521, 2522, 2523, 2524, 2525, 2526, 2527, 2528, 2529, 2530, 2531, 2532, 2533, 2534, 2535, 2536, 2537, 2538, 2539, 2540, 2541, 2542, 2543, 2544, 2545, 2546, 2547, 2548, 2549, 2550, 2551, 2552, 2553, 2554, 2555, 2556, 2557, 2558, 2559, 2560, 2561, 2562, 2563, 2564, 2565, 2566, 2567, 2568, 2569, 2570, 2571, 2572, 2573, 2574, 2575, 2576, 2577, 2578, 2579, 2580, 2581, 2582, 2583, 2584, 2585, 2586, 2587, 2588, 2589, 2590, 2591, 2592, 2593, 2594, 2595, 2596, 2597, 2598, 2599, 2600, 2601, 2602, 2603, 2604, 2605, 2606, 2607, 2608, 2609, 2610, 2611, 2612, 2613, 2614, 2615, 2616, 2617, 2618, 2619, 2620, 2621, 2622, 2623, 2624, 2625, 2626, 2627, 2628, 2629, 2630, 2631, 2632, 2633, 2634, 2635, 2636, 2637, 2638, 2639, 2640, 2641, 2642, 2643, 2644, 2645, 2646, 2647, 2648, 2649, 2650, 2651, 2652, 2653, 2654, 2655, 2656, 2657, 2658, 2659, 2660, 2661, 2662, 2663, 2664, 2665, 2666, 2667, 2668, 2669, 2670, 2671, 2672, 2673, 26

**Griffiths (Mac)**  
 From: Colin Griffiths & Associates LLP  
 Price: Personal for Macintosh \$49.95 review 200  
**Sprinkler** (previously known as BiffSaver/SaveIt)  
 From: All Microsystems  
 Price: Personal for \$29.95

Sliding between the microscope and the brain

2. When it's a low-key idea product, we don't know what it looks like before when we requested an evaluation copy from Calli Griffiths & Associates Ltd., they told us to just download it from their Web site. We did, and we can't miss.

There are versions for both DOS/Windows and the Macintosh. The Windows version downloads as a 1.2 MB zipped file, unzipping to just under 4 MB of space.

Each course contains French or English texts. The third program was perfect and the initial questions straightforward.

The interface is very Windows and beautiful replicates German Canada form. The program is very pleasing in all its visual elements. Users familiar with Windows canvas form will get around easily.

If a household is filing two returns—for example a husband and wife—each has two windows. Within each taxpayer's window are other windows for each page of the return. Also found here are utility pages, such as a T. Hulseburn, Philadelphia Tax share and other specific forms applicable to a user's tax situation.

This method allows finding or recording information from different pages or records. The program has the usual array of high-and-low buttons and all of them worked perfectly.

If you do download the software, you must call the company in order to use the product. We suspect that by next year, when most MMS transactions will be done online, this will be one of the companies to adapt a completely electronic business-to-business relationship. They are well poised to do so, with a small overhead and little pay.

ily reviewed. If you have an Internet connection and don't feel like without a manual, check out the software at their site. If you don't like it, don't buy it, but we think you will like it.

Contact CCH Software & Services Ltd. 120  
Finsbury Rd. 4th Fl. City, UK EC2A 4DU  
020 2666 1000 Fax: 020 2666 1700 English helpline 020  
200 2020 French helpline 019 427 4400 Fax 019  
427 4400

Email: [griffing@griffing.com](mailto:griffing@griffing.com)  
 Web: <http://info.enr.com/regional-griffing>  
 Service: All Microsystems, 283 West Beaver Creek,  
 No. 500-10, Richmond Hill, Ont., L4B 1L7, Tel: 905-709-  
 7111, Fax: 905-709-1004

**File Cruncher (publisher)**  
From: The Cruncher Software Inc.  
Price: \$18.00

Another innovative company is TaxCruncher Software. This company uses your existing spreadsheet program to do tax calculations.

You may already have everything you need to perform complex financial calculations, so why go out and buy a whole program when all you need are the government bonds?

To file online comes Tax Counselors, it works like this: you download a small XML computer file for your Q6 and your spouse's program. Using *FileShare*, you upload it to a central spreadsheet for you and your spouse's program and load the file. Enter your EIN number, then call the company's 1-800 number. Arrange payment, and the company will give you an online

MacTax Corp. is the engineer of the new industry standard "Step by Step" method of tax preparation. This is our 7th year on the market and we are improving and adding new features each year!

MacTax Corp. is the engineer of the new industry standard "Stop by Stop" method of tax preparation. This is our 7th year on the market and we are improving and adding new features each year!

1999, 2000, 2001, 2002, 2003, 2004, 2005, 2006, 2007, 2008, 2009, 2010, 2011, 2012, 2013, 2014, 2015, 2016, 2017, 2018, 2019, 2020, 2021, 2022, 2023, 2024, 2025, 2026, 2027, 2028, 2029, 2030, 2031, 2032, 2033, 2034, 2035, 2036, 2037, 2038, 2039, 2040, 2041, 2042, 2043, 2044, 2045, 2046, 2047, 2048, 2049, 2050, 2051, 2052, 2053, 2054, 2055, 2056, 2057, 2058, 2059, 2060, 2061, 2062, 2063, 2064, 2065, 2066, 2067, 2068, 2069, 2070, 2071, 2072, 2073, 2074, 2075, 2076, 2077, 2078, 2079, 2080, 2081, 2082, 2083, 2084, 2085, 2086, 2087, 2088, 2089, 2090, 2091, 2092, 2093, 2094, 2095, 2096, 2097, 2098, 2099, 2100, 2101, 2102, 2103, 2104, 2105, 2106, 2107, 2108, 2109, 2110, 2111, 2112, 2113, 2114, 2115, 2116, 2117, 2118, 2119, 2120, 2121, 2122, 2123, 2124, 2125, 2126, 2127, 2128, 2129, 2130, 2131, 2132, 2133, 2134, 2135, 2136, 2137, 2138, 2139, 2140, 2141, 2142, 2143, 2144, 2145, 2146, 2147, 2148, 2149, 2150, 2151, 2152, 2153, 2154, 2155, 2156, 2157, 2158, 2159, 2160, 2161, 2162, 2163, 2164, 2165, 2166, 2167, 2168, 2169, 2170, 2171, 2172, 2173, 2174, 2175, 2176, 2177, 2178, 2179, 2180, 2181, 2182, 2183, 2184, 2185, 2186, 2187, 2188, 2189, 2190, 2191, 2192, 2193, 2194, 2195, 2196, 2197, 2198, 2199, 2200, 2201, 2202, 2203, 2204, 2205, 2206, 2207, 2208, 2209, 2210, 2211, 2212, 2213, 2214, 2215, 2216, 2217, 2218, 2219, 2220, 2221, 2222, 2223, 2224, 2225, 2226, 2227, 2228, 2229, 2230, 2231, 2232, 2233, 2234, 2235, 2236, 2237, 2238, 2239, 2240, 2241, 2242, 2243, 2244, 2245, 2246, 2247, 2248, 2249, 2250, 2251, 2252, 2253, 2254, 2255, 2256, 2257, 2258, 2259, 2260, 2261, 2262, 2263, 2264, 2265, 2266, 2267, 2268, 2269, 2270, 2271, 2272, 2273, 2274, 2275, 2276, 2277, 2278, 2279, 2280, 2281, 2282, 2283, 2284, 2285, 2286, 2287, 2288, 2289, 2290, 2291, 2292, 2293, 2294, 2295, 2296, 2297, 2298, 2299, 2300, 2301, 2302, 2303, 2304, 2305, 2306, 2307, 2308, 2309, 2310, 2311, 2312, 2313, 2314, 2315, 2316, 2317, 2318, 2319, 2320, 2321, 2322, 2323, 2324, 2325, 2326, 2327, 2328, 2329, 2330, 2331, 2332, 2333, 2334, 2335, 2336, 2337, 2338, 2339, 2340, 2341, 2342, 2343, 2344, 2345, 2346, 2347, 2348, 2349, 2350, 2351, 2352, 2353, 2354, 2355, 2356, 2357, 2358, 2359, 2360, 2361, 2362, 2363, 2364, 2365, 2366, 2367, 2368, 2369, 2370, 2371, 2372, 2373, 2374, 2375, 2376, 2377, 2378, 2379, 2380, 2381, 2382, 2383, 2384, 2385, 2386, 2387, 2388, 2389, 2390, 2391, 2392, 2393, 2394, 2395, 2396, 2397, 2398, 2399, 2400, 2401, 2402, 2403, 2404, 2405, 2406, 2407, 2408, 2409, 2410, 2411, 2412, 2413, 2414, 2415, 2416, 2417, 2418, 2419, 2420, 2421, 2422, 2423, 2424, 2425, 2426, 2427, 2428, 2429, 2430, 2431, 2432, 2433, 2434, 2435, 2436, 2437, 2438, 2439, 2440, 2441, 2442, 2443, 2444, 2445, 2446, 2447, 2448, 2449, 2450, 2451, 2452, 2453, 2454, 2455, 2456, 2457, 2458, 2459, 2460, 2461, 2462, 2463, 2464, 2465, 2466, 2467, 2468, 2469, 2470, 2471, 2472, 2473, 2474, 2475, 2476, 2477, 2478, 2479, 2480, 2481, 2482, 2483, 2484, 2485, 2486, 2487, 2488, 2489, 2490, 2491, 2492, 2493, 2494, 2495, 2496, 2497, 2498, 2499, 2500, 2501, 2502, 2503, 2504, 2505, 2506, 2507, 2508, 2509, 2510, 2511, 2512, 2513, 2514, 2515, 2516, 2517, 2518, 2519, 2520, 2521, 2522, 2523, 2524, 2525, 2526, 2527, 2528, 2529, 2530, 2531, 2532, 2533, 2534, 2535, 2536, 2537, 2538, 2539, 2540, 2541, 2542, 2543, 2544, 2545, 2546, 2547, 2548, 2549, 2550, 2551, 2552, 2553, 2554, 2555, 2556, 2557, 2558, 2559, 2560, 2561, 2562, 2563, 2564, 2565, 2566, 2567, 2568, 2569, 2570, 2571, 2572, 2573, 2574, 2575, 2576, 2577, 2578, 2579, 2580, 2581, 2582, 2583, 2584, 2585, 2586, 2587, 2588, 2589, 2590, 2591, 2592, 2593, 2594, 2595, 2596, 2597, 2598, 2599, 2600, 2601, 2602, 2603, 2604, 2605, 2606, 2607, 2608, 2609, 2610, 2611, 2612, 2613, 2614, 2615, 2616, 2617, 2618, 2619, 2620, 2621, 2622, 2623, 2624, 2625, 2626, 2627, 2628, 2629, 2630, 2631, 2632, 2633, 2634, 2635, 2636, 2637, 2638, 2639, 2640, 2641, 2642, 2643, 2644, 2645, 2646, 2647, 2648, 2649, 2650, 2651, 2652, 2653, 2654, 2655, 2656, 2657, 2658, 2659, 2660, 2661, 2662, 2663, 2664, 2665, 2666, 2667, 2668, 2669, 2670, 2671, 2672, 2673, 2674, 2675, 2676, 2677, 2678, 2679, 2680, 26

- Requires minimal income tax knowledge
- On-line help function
- Prepare an unlimited number of returns
- Minimum system requirements: 812K

1999, 2000, 2001, 2002, 2003, 2004, 2005, 2006, 2007, 2008, 2009, 2010, 2011, 2012, 2013, 2014, 2015, 2016, 2017, 2018, 2019, 2020, 2021, 2022, 2023, 2024, 2025, 2026, 2027, 2028, 2029, 2030, 2031, 2032, 2033, 2034, 2035, 2036, 2037, 2038, 2039, 2040, 2041, 2042, 2043, 2044, 2045, 2046, 2047, 2048, 2049, 2050, 2051, 2052, 2053, 2054, 2055, 2056, 2057, 2058, 2059, 2060, 2061, 2062, 2063, 2064, 2065, 2066, 2067, 2068, 2069, 2070, 2071, 2072, 2073, 2074, 2075, 2076, 2077, 2078, 2079, 2080, 2081, 2082, 2083, 2084, 2085, 2086, 2087, 2088, 2089, 2090, 2091, 2092, 2093, 2094, 2095, 2096, 2097, 2098, 2099, 2100, 2101, 2102, 2103, 2104, 2105, 2106, 2107, 2108, 2109, 2110, 2111, 2112, 2113, 2114, 2115, 2116, 2117, 2118, 2119, 2120, 2121, 2122, 2123, 2124, 2125, 2126, 2127, 2128, 2129, 2130, 2131, 2132, 2133, 2134, 2135, 2136, 2137, 2138, 2139, 2140, 2141, 2142, 2143, 2144, 2145, 2146, 2147, 2148, 2149, 2150, 2151, 2152, 2153, 2154, 2155, 2156, 2157, 2158, 2159, 2160, 2161, 2162, 2163, 2164, 2165, 2166, 2167, 2168, 2169, 2170, 2171, 2172, 2173, 2174, 2175, 2176, 2177, 2178, 2179, 2180, 2181, 2182, 2183, 2184, 2185, 2186, 2187, 2188, 2189, 2190, 2191, 2192, 2193, 2194, 2195, 2196, 2197, 2198, 2199, 2200, 2201, 2202, 2203, 2204, 2205, 2206, 2207, 2208, 2209, 2210, 2211, 2212, 2213, 2214, 2215, 2216, 2217, 2218, 2219, 2220, 2221, 2222, 2223, 2224, 2225, 2226, 2227, 2228, 2229, 2230, 2231, 2232, 2233, 2234, 2235, 2236, 2237, 2238, 2239, 2240, 2241, 2242, 2243, 2244, 2245, 2246, 2247, 2248, 2249, 2250, 2251, 2252, 2253, 2254, 2255, 2256, 2257, 2258, 2259, 2260, 2261, 2262, 2263, 2264, 2265, 2266, 2267, 2268, 2269, 2270, 2271, 2272, 2273, 2274, 2275, 2276, 2277, 2278, 2279, 2280, 2281, 2282, 2283, 2284, 2285, 2286, 2287, 2288, 2289, 2290, 2291, 2292, 2293, 2294, 2295, 2296, 2297, 2298, 2299, 2300, 2301, 2302, 2303, 2304, 2305, 2306, 2307, 2308, 2309, 2310, 2311, 2312, 2313, 2314, 2315, 2316, 2317, 2318, 2319, 2320, 2321, 2322, 2323, 2324, 2325, 2326, 2327, 2328, 2329, 2330, 2331, 2332, 2333, 2334, 2335, 2336, 2337, 2338, 2339, 2340, 2341, 2342, 2343, 2344, 2345, 2346, 2347, 2348, 2349, 2350, 2351, 2352, 2353, 2354, 2355, 2356, 2357, 2358, 2359, 2360, 2361, 2362, 2363, 2364, 2365, 2366, 2367, 2368, 2369, 2370, 2371, 2372, 2373, 2374, 2375, 2376, 2377, 2378, 2379, 2380, 2381, 2382, 2383, 2384, 2385, 2386, 2387, 2388, 2389, 2390, 2391, 2392, 2393, 2394, 2395, 2396, 2397, 2398, 2399, 2400, 2401, 2402, 2403, 2404, 2405, 2406, 2407, 2408, 2409, 2410, 2411, 2412, 2413, 2414, 2415, 2416, 2417, 2418, 2419, 2420, 2421, 2422, 2423, 2424, 2425, 2426, 2427, 2428, 2429, 2430, 2431, 2432, 2433, 2434, 2435, 2436, 2437, 2438, 2439, 2440, 2441, 2442, 2443, 2444, 2445, 2446, 2447, 2448, 2449, 2450, 2451, 2452, 2453, 2454, 2455, 2456, 2457, 2458, 2459, 2460, 2461, 2462, 2463, 2464, 2465, 2466, 2467, 2468, 2469, 2470, 2471, 2472, 2473, 2474, 2475, 2476, 2477, 2478, 2479, 2480, 2481, 2482, 2483, 2484, 2485, 2486, 2487, 2488, 2489, 2490, 2491, 2492, 2493, 2494, 2495, 2496, 2497, 2498, 2499, 2500, 2501, 2502, 2503, 2504, 2505, 2506, 2507, 2508, 2509, 2510, 2511, 2512, 2513, 2514, 2515, 2516, 2517, 2518, 2519, 2520, 2521, 2522, 2523, 2524, 2525, 2526, 2527, 2528, 2529, 2530, 2531, 2532, 2533, 2534, 2535, 2536, 2537, 2538, 2539, 2540, 2541, 2542, 2543, 2544, 2545, 2546, 2547, 2548, 2549, 2550, 2551, 2552, 2553, 2554, 2555, 2556, 2557, 2558, 2559, 2560, 2561, 2562, 2563, 2564, 2565, 2566, 2567, 2568, 2569, 2570, 2571, 2572, 2573, 2574, 2575, 2576, 2577, 2578, 2579, 2580, 2581, 2582, 2583, 2584, 2585, 2586, 2587, 2588, 2589, 2590, 2591, 2592, 2593, 2594, 2595, 2596, 2597, 2598, 2599, 2600, 2601, 2602, 2603, 2604, 2605, 2606, 2607, 2608, 2609, 2610, 2611, 2612, 2613, 2614, 2615, 2616, 2617, 2618, 2619, 2620, 2621, 2622, 2623, 2624, 2625, 2626, 2627, 2628, 2629, 2630, 2631, 2632, 2633, 2634, 2635, 2636, 2637, 2638, 2639, 2640, 2641, 2642, 2643, 2644, 2645, 2646, 2647, 2648, 2649, 2650, 2651, 2652, 2653, 2654, 2655, 2656, 2657, 2658, 2659, 2660, 2661, 2662, 2663, 2664, 2665, 2666, 2667, 2668, 2669, 2670, 2671, 2672, 2673, 2674, 2675, 2676, 2677, 2678, 2679, 2680, 26

Complete a basic return using five "Windows"  
Access any fax area instantly  
Requires only 1/2 MB of hard drive space  
Ensures that you won't miss a deduction

**Abstract**

- Internal self diagnosis
- Self-employed income forms
- Depreciation & home use forms
- Spousal income & marital status

*\*An amazing number of schedules for the cost of the program — really does support the average borrower.*

Ken Delton • The Carpenters' Power

APACHE® HOMETAX  
800-828-2222

We at MacTax are offering all **NONETAX** for Macintosh users our annual update for price of \$14.95, even though you may not have previously bought our program. We feel you shouldn't have to pay full retail price for a new program just because your current supplier decided not to produce a Macintosh version. Simply send in a proof of purchase along with \$14.95, plus \$1.25 for shipping & handling, and applicable taxes, and we will send you our complete package. You can enter send in a cheque or FAX us with your credit card number.

Available February 27, 1996  
at your local dealer.

**Suggested retail price \$29.95**  
*Retailers may sell for less*  
 (Annual license \$ 14.95)

## MacTax

Canada's #1 Best Selling Tax Program  
for the Macintosh

MacFar Corp. 4255 Sherwoodlane Blvd. Milwaukee, Wis. 53212 Tel: (414) 433-8348 Fax: (414) 433-8371











# Making tracks

## The Need for Speed driver's ed

BY GORDON COBLE

**B**uilt in November of last year, *Need for Speed* is the latest addition to the new software catalog of Electronic Arts' Canadian division, located in Burnaby, B.C. In fact, EA Canada has been here for a long time, and probably the best evidence of the branch is *Need for Speed*.

It's certainly not *Need for Speed*, but *Need for Speed* has just enough suspension in it that most cars will be swayed to go beyond the individual leader setting and try to break the lap times and top-speed status that drop into the product. This game won't keep you on four points of precision-steering: a Mazda from the back, but if you really want more speed, this is the place to race.

Before you hit the track, you'll want to make sure you've got the tools to get the job done. NFS is a great joystick game and, though there are a number of real choices out there, I've used a CM EliteLink to get together some pretty impressive numbers. It's the place to look for performance, the 1000 for driving, between 1 to 1000 for 2 to 1000 for 3, meaning: grip, speed and top speed. When you're not even got close, it's a real giveaway will automatically be discovered out of the excitement of Cool Runers.

But enough of that. It's on in the game, building the Perfect Drive begins by setting up certain control options before getting behind the wheel of the right car. While the first machine differs from track to track, there are a number of things that are plain that can be changed around with.

For starters, there's a choice of automatic transmission, as the conventional shift points of a manual tranny will always get you there faster. Almost as important is a turbo accelerator valve, which gives a perspective, although NFS employs constant "boost" pressure, which gives you the feeling that the car is simply in a state of pure bliss with the drive-

ing from that perspective. And finally, there's a choice of how to get going. NFS comes with three and graphic options, and several variations on the same scenario.

The *Need for Speed* world is made up of several courses, each one of which is a real track. To say that the racing mode is too close to home is a high understatement. However, many of the best cars are interchangeable. The simulation aspects of the game

played up in *Time Trials* will always have that little TT disclaimer, meaning: right, maybe there, and that's really last racing, is it?

Make sure to get those cars up into the atmosphere before the final green light to start the race. You'll be faster than a race car just along with the track if you don't. Oh, yes.

With the four green lights flashing, pushing the first gear button in the right changes — or later, I guess, you'll be waiting around corners of accuracy, and definitely not under it's the same amount of time at every race start, so you'll get used to it.

**If you've played your cards right,  
you should be travelling  
17 m.p.h. as you approach  
Turn 3, a dipping right hander.**

**COMPUTER CLEARANCE  
WAREHOUSE**

QUALITY PRE-OWNED COMPUTERS & PARTS  
We Love Trades!

**USED VGA  
MONITORS**

**We Buy (Dead or Alive) & Sell  
Call Now!**

**Vancouver's BEST Computer Store**



**Business Machines**

250 KINGMAN, VANCOUVER, B.C.  
**879-7776**

OPEN 10 AM TO 6 PM MON TO SAT  
SUN 11 AM TO 5 PM

**THE BEST SOURCE OF MEMORY UPGRADES**

We offer the best prices in RAM and DRAM for your system

PC, Software and hardware of various prices

Mac Software and hardware at the prices

PC and Mac system upgrades

LIFETIME WARRANTY memory upgrades

For MAC, more than PC system and software

**FAST SERVICE**

ON ANYTHING PC OR MAC

and much more



**DISCOUNT COMPUTER CLUB**

Established in 1985

116 HART St. East, Suite 101, VAN. BC V6C 1A1 Tel: (604) 681-1100 Fax: (604) 681-1101

For more info and to get a copy of our catalog, call us at (604) 681-1101. We are now open 10 AM to 6 PM MON TO SAT. SUN 11 AM TO 5 PM.

**DON'T WASTE YOUR MEMORY**

FOR 10 AM THE BEST MEMORY UPGRADES IN CANADA

Discount PC & Mac, 101 HART St. East

Discount PC & Mac, 101 HART St. East

Discount PC & Mac, 101 HART St. East

Discount PC & Mac, 101 HART St. East

Discount PC & Mac, 101 HART St. East

Discount PC & Mac, 101 HART St. East

Discount PC & Mac, 101 HART St. East

Discount PC & Mac, 101 HART St. East

Discount PC & Mac, 101 HART St. East

Discount PC & Mac, 101 HART St. East

Discount PC & Mac, 101 HART St. East

Discount PC & Mac, 101 HART St. East

Discount PC & Mac, 101 HART St. East

Discount PC & Mac, 101 HART St. East

Discount PC & Mac, 101 HART St. East

Discount PC & Mac, 101 HART St. East













# Travel through Paris with Madeline

BY PEDRO ABRAIS

## Madeline and the Magnificent Puppet Show

Platform: Windows  
Age: Five and up  
System: IBM 486 Minimum 700 Windows 3.1  
RAM: 1MB (Suggested 2MB)  
Autoplay Feature  
Street Price: \$39.99

**B**ouquet Hotel Hotel! Welcome to Madeline's world. It is an enchanting world of song, adventure and discovery that introduces children to French and Spanish.

The interactive journey will introduce you to her world in Paris, giving you the French or Spanish you can pick object translations of everyday objects you encounter. The foreign language education is offered in such a subtle way that it is just one part of the surroundings of the program.

The story unfolds around Madeline having to solve riddles that eventually allow to stop a crocodile puppet show to save money for her wedding. As the journey through Paris the crocodile situation along the way to find out why in order to obtain another problem solving. In so doing, she will be exposed to over 300 words in English, French and Spanish vocabulary. Your children also get to explore their country by peering a backdrop and viewing the puppets for the show. They can also create an invitation for the event.

The animation is entertaining and light. Madeline directs the in 2D illustrations into events and speaks with delight as they come on board. The scenes always change to fit the scene.



Items that are seen on the screen is animated. The areas are always rounded out in English and French as Spanish instruction or you have decided to learn in after a few plays they become familiar.

Madeline's classroom offers the best opportunity to practice your language skills. Initially the new student watches pictures to learn pictures, their pictures in words and finally English words in French or Spanish words. With more six words you usually mastered, a certificate of achievement is displayed.

completing the program, results in the satisfaction of your young ones. Considerable parents very want to obtain primary French or Spanish lessons to supplement the program and help bridge from the initial content.

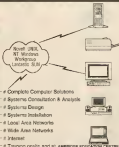
A minor quibble is a background music track that cannot be turned down or muted, which drives some parents mad, but this seems to be a flaw. The title track is especially easy for children to learn and sing correctly. Another minor point: there is no way to print the scenes (for coloring only), which is really a shame given the rich details the program offers. Although the program lacks a save feature, it will automatically save your game upon exiting.

Although the program does not claim to cater to one gender or the other, your little girl seemed to warm up to having a character female lead. The character seems to be a very nice one that make her an attractive role model but this one line, based at Madeline's looks on a very small, and ABC TV shows her on Saturday mornings in some parts of the country.

While Madeline will not take your child into a trip, the program, this is one of the best foreign language lessons as the market that I have seen for younger children. Even if your children are not in a French immersion school, you will be amazed at the amount of French they can pick up in a very short time. Don't be surprised when your five-year-old speaks everyday household objects (and French) around the dinner table. *Christy Magliocco*

Contact Christine Winkler: 1-800-430-3977 (SAS-RTS)

## Hardware, Software, Networks, Internet Professional Training, Remot. LAN Monitoring



**AIMBRIDGE®**  
Business Solutions

Total Solutions

Tel: (800) 458-0100 / Fax: (800) 458-0101  
3120 Kingston, Vancouver, B.C., Canada V5R 5P9

## GS COMPUTERS

### Sales Service Support

5811 King George Hwy.  
Surrey, B.C. V3T 2Z3  
Telephone: (604) 535-0024  
Facsimile: (604) 561-4180

Hours:  
Monday to Friday  
9:00 am - 6:00 pm  
Saturday  
10:00 am - 5:00 pm

Prices subject to change without notice.

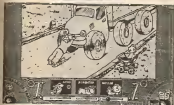
## Upgrade your computer to...

486DX2-66MHz	\$205
486DX4-100MHz	\$285
75MHz Pentium Processor	\$495
90MHz Pentium Processor	\$525
100MHz Pentium Processor	\$575
120MHz Pentium Processor	\$765

## Free Installation

On dry background  
Cash only





## Simpler science

BY PEDRO ABRAIS

### The Carsten Guide to Physics

From: Home-Games Interactive  
Street Price: \$49.95  
Recommended age: 10 and up  
System Requirements: Sun-Format CD supports Multimedia Windows and Macintosh

You have heard the expression "You don't need to be a rocket scientist to do this?" But what if the career or job that you chose eventually demands some rocket science knowledge, in the literal sense?

The Carsten Guide to Physics is "for any one with a passing interest in physics — or with an interest in physics." This is a perfect title for all those parents who buried physics and chose when they saw a slide rule when they were in high school, but at least now you can pass the physics and go over that last head-scratching lesson one more time.

The program is co-created by Naps, a co-

Continued on page 118



## Newsbytes NEWS NETWORK 1994 CD-ROM UPDATE

For Macintosh & PCs (with DOS or Windows) - 60,000 keyword searchable computer and television news stories. Over 200 digitized photos & graphics! This is Newsbytes' complete archives, May 1993 to July 1994. Still low priced at \$29.95 plus \$4.50 S & H.

▲ ▲ ▲

1994 Volume IV owners qualify for a \$5.00 discount by sending a photocopy of the Vol IV's cover with order. Subsequent AMIS in VISA accepted, or order checks payable to NEWSBYTES. Money back if not satisfied. Tax orders to 610-644-4444 by mail to Newsbytes News Network, 450 W. Glendale St., Stillwater MN 55081, USA or send your local orders to [amist@nbnnewsbytes.com](mailto:amist@nbnnewsbytes.com).

NAME \_\_\_\_\_  
ADDRESS \_\_\_\_\_  
CITY-STATE-PROVINCE \_\_\_\_\_  
COUNTRY \_\_\_\_\_ ZIP/POSTAL CODE \_\_\_\_\_  
MC/VISA/AMEX \_\_\_\_\_ exp. date \_\_\_\_\_

## Does Your Office have a Recycling Program?

Conserve our environment and  
save \$\$\$ at the same time

### Use Recharged Toner Cartridges







# Stupid Net tricks Part V: Learning from other's HTML experiments

BY KEITH SCHENGLI ROBERTS

You already know some HTML, and have created your own Web site. While making the Web you begin to see some interesting things appearing on other people's Web pages that you didn't think were possible. As an experienced HTML author, this gets you thinking: How did they get those extra vertical spaces in there? How do you get a banner down the left side of your Web page? *Heaven!* This is probably worthy of further investigation. After all, it's always a good idea to try to keep up with the latest developments in HTML. You are also beginning to think that maybe your own Web pages will begin to look stale in comparison. It's time to learn a few new HTML tricks.

One of the easiest ways to learn about HTML is to read code written by other HTML authors. I don't believe there's a browser that lets you read and often download the HTML code from the Web page you are viewing. Many people learn enough about HTML from this approach to start creating their own Web pages. But once you've created your own Web page, it's a good idea to keep viewing the HTML code on other people's Web pages from time to time — you might find new ways to make your own code more

effective, or learn something new. Many of the following HTML tricks were created by people experimenting with their HTML code or were stumbled upon by accident. Either way you will find some of the following tricks useful to incorporate into your own Web pages.

## Adding spacing to a Web page

If you're fed up with spacing problems with HTML, as all you know, that it is very tedious to try to manipulate how things appear on your computer screen, HTML contains the concept of a document, not a browser. This can be really annoying when you are

trying to get things to look exactly the way you want them to on your Web page.

Letting you have a bit of control on a Web page, and even to separate a couple of paragraphs from each other. All you need to do is add another line. The problem is that when you put one or more paragraphs (P) tags together, they are interpreted by your Web browser as a single tag. You can have a million paragraphs on a line, and it will still be interpreted as only one. So how do you get around this? Simple. Add a break tag to each paragraph tag to force a new line. If you wanted you have options to adjust

on your Web page, you'd enter the following code:

```
<P><BR></P>
```

To add more lines, simply add more <BR> tags in combination. The break tag forces the browser to interpret the next paragraph tag as being on a new line, and displays it accordingly.

What about horizontal spacing? Whenever you type more than one space in a line, it is referred to as a single space. There's no such thing as a colon tag in HTML, but there are yet to be done if you are willing to invest the time.

First, using a paint program, create a small black image file of exactly the right width needed, which keeps its height under five pixels. This will work on your browser. The easiest way to do this is to use a computer's GIF file, using tools like Paint Shop Pro 3.11 for Windows or Transparency 1.0 for the Mac. Insert the GIF file which needed to be done using the standard <IMG SRC="image.gif"> tag. There are some disadvantages to this approach, it adds to the amount of images that have to be transferred, and any-

Continued on page 86



## Lower Mainland's most affordable online service provider!

**\$0.80**

per hour\*\* pay as you go hourly claim

**\$8.00**

per month\*\* 100% time banking

**\$12.50**

per month\*\* Flat rate, 24hrs/day

**\$35.00**

Slater Membership. Details below

### INTERNET STARTER MEMBERSHIPS

**\$35.00**

**FLAT RATE 2 HOURS PER DAY**  
\$20 setup fee  
First month's access fee  
10 hours of bonus backed time  
Monthly fee after first month \$35.00

OR

**MONTHLY PAY AS YOU GO**  
Includes:  
\$20 setup fee  
30 hours of backed time  
No monthly fee  
Additional online time \$0.80/hr

All memberships include access to the best BBS in town!  
Based on annual membership, no setup fee  
\$20 one time setup fee  
GSM & PST not included

**Tired of busy signals?  
Switch to us now!**

To find out more about Infoserve's services and receive details by fax, call 482-8222 (24hr), and enter 8200.

482-8222  
INFO-ROX  
8200

**INFOSERVE**



Have you heard of Dragon Gate?

**YOU WILL!**

**Dragon Gate™**



Visit this exciting web site on our web server

Make money fast in the hottest growth industry. Be an authorized reseller for Dragon Gate. Call for details.

OFFICE: 482-8238 SIGN UP MODEM LINE: 482-8220 <http://www.infoserve.net>

**GET THE NET!**



Western Canada's Largest Internet Provider

**INTERNET  
DIRECT**

*Call Today!*

- *Experienced Technical Support*
- *Friendly Customer Service*
- *Individual Access Accounts*

**\$19.95\*** per month  
plus taxes and fees

**(604) 488-1900**

**FAX: (604) 602-1700**

**TOLL FREE: 1-800-987-8884**

**E-mail: [support@direct.ca](mailto:support@direct.ca)**

**[www.direct.ca](http://www.direct.ca)**



In the early days, supplying Internet access to people was a lot like giving a loaner to your neighbor. A lot of options got into the business, and, at the same time, a lot of people took their eye off their clients. Thus business models (designed along with you) were for a while not the unspoken happenings.

First most people decided that the Internet was for those who people that nobody ever imagined. And that's when it all fell apart.

Nowadays everyone's talking about the Internet. What little technical support was available could no longer cope with the volume. As the Internet grew so did the complexity of finding your way around. First getting your software to work was not to be taken for granted anymore.

We know these things to be so because we've been around since the beginning. In fact, you might say that Canada's newest Internet computer is also Canada's oldest. And what our experience tells us is that the time has come to do things in a different way.

Radically different.

#### INTRODUCING iSTAR INTERNET INC. - CANADA'S INTERNET NAVIGATOR

At its core, iStar represents the combined resources and talents of NETH and i-Connect. NETH pioneered dial-up Internet access in Canada and has always taken the lead in developing new products and services with emphasis on the home and office user. i-Connect on the other hand have long held the title as Canada's leading provider of Internet solutions to the business community. Both provided much of the knowledge to build Canada's fastest growing government sponsored backbone, CA\*net. What we're talking about here are very high tech, heavy weights in their own right pouring forces with major players across the country to remodel the Canadian Internet landscape as we know it.

The result will be a whole new ball game for users of Internet services.

#### A BIGGER, BETTER BACKBONE

The plan for our network are ambitious and achievable. We have built a cross Canada network architecture that is "big" enough and "fast" enough to handle your most demanding demands well into the future. For the technically minded, we're talking more than 73 lines. Try doubling that for starters. And aside from the increased bandwidth and throughput, it will mean that our subscribers can access the Internet locally from any of our points of presence from Halifax to Victoria. The cellular people call that "omniaccess." If you're a part of your business realm, you'll probably call it a win.

#### OUR "iStarNet" DIAL SERVICE FOR HOME OR OFFICE

We've totally analyzed the way people buy dial up Internet access and we've come to some conclusions people want exactly that amount of access they need and they don't expect to pay for anything more.

We agree.

We've put together a range of fully featured packages that are specifically built around the real needs of our users. These connection packages start from as little as \$15 per month and run the whole gamut up to and including high speed connections for the most sophisticated business applications. And any

of these packages can be further enhanced by adding options such as additional user IDs, corporate billing, weblogs, etc.

We can also supply you with a custom configured suite of connection software that we developed our services. It's called "Star Personal Navigator" and in

fact you are well within your rights to expect at least that much from your service provider.

#### AND THEN WE WANT A BIT MORE

We created our own version of the World Wide Web called "iStar North" for the exclusive use of our subscribers. We did it because we first felt giving you support to get online is only half of the story. Supporting you when you get there is the other half.

Thus iStar will provide you with easy access to the best information sources the Internet has to offer as a constantly updated basis. It will also offer you the benefits of being a member of an online "community" as much the same way that, up till now, has been the exclusive realm of the major Online Services. There are forums for the exchange of ideas, experience, support and otherwise. For the first time on the Internet, World Wide Web and other resources will be filtered and evaluated according to a reliable system that you can understand and relate to. Naturally, it also serves as our most immediate connection with our subscribers and will become our prime channel for communications with and serving their concerns.

#### BUSINESS ON THE NETT YOU WANT

We make no bones about it, we believe passionately that business use of the Internet can be an enormous commercial advantage. And we've come up with an array of security and firewall specialists, consulting, professional services and dedicated connection packages that are designed to make a business out of you. Or whenever else makes those kind of decisions within you reach.

We have network architects and consultants who have vision and track records that are hard earned and available. System managers who are accessible and down. Technicians who roll their sleeves up and wear sweatbands. Web analysis services that will break more walls off and make your corporate presence on the Internet more powerful. And programmers who can make a computer sing UNIX while using as many proprietary pages.

Seriously.

#### WHY NOW?

Why? The thousands of people who subscribe to our services today do so because of the quality of the communication tools that we provide. And because of how they use of the Internet but, in some fundamental way, enhanced their lives. Both personally and professionally.

They have made us the largest Internet provider in Canada.

The reason they say with us is because they recognize a company that is committed to keeping them firmly placed on the crest of the wave, well into the future.

This ad has given you a few insights into where we're going. We hope you also see it as an invitation to come along.

# THE TIME HAS COME.

come is its promise. It's sole purpose in life is to get you onto and around the Internet as quickly and as painlessly as possible. It consumes all the latest "killer" Internet applications. It's rock solid. And, most importantly, we support it to the hilt.

#### WHILE WE'RE TALKING SUPPORT

As one of our customers, you can bank on the highest level of customer and technical support that business has to offer. Your calls will always be answered by real people, who actually have real concerns. And you'll be able to make that call whenever you feel like making it. 24 hours a day, 7 days a week. We believe



CALL US TODAY  
**1-800-848-6786**

If you're already online email: info@istar.net  
or visit: www.istar.net

# From basement to boardroom in two years

BY JAMES MACFARLANE



Two years ago, if you weren't a computer student, a teacher or a serious computer enthusiast, you probably hadn't heard of the Internet. Today, it teaches the

live of virtually all of us. Very easily does a technology go from obscurity to dominance in such a short time.

Let's take a look at how we got here from there, and at what makes the Internet so compelling.

What we now call the Internet was developed by the military as a secure communications system. It was designed to withstand a nuclear attack by finding alternate routes to a destination. Any good Internet book can give you the fine details, but that's the basic story.

Some bulletin board services (BBS) were hooked up to the Internet and provided an e-mail gateway and access to some of the most serious of Internet newsgroups, but that was about it. The promise of things bigger and better was there, but little was it equipped to deliver such news.

## The first public Internet sites

About all the computers on the Internet at that time ran an operating system called Unix. To most computer users, Unix was a big scary monster that ran machines.

In fact, Unix is a 32-bit multitasking, multi-user operating system with features making it well-suited for use in wide area networks (WANs). The Internet is simply a large host.

With Net users numbering in the tens of millions, big business woke up to the fact that it was in danger of missing the boat if it didn't jump right into the "Internet thing."

Unix later became available for personal computers. The reason that instead of running DOS or Windows 3.1, a number of which was particularly good at multitasking, you had an operating system capable of handling anything the Internet had to offer. That was about two years ago — about the same time the first public Internet service providers (ISPs) went online.

## An infant industry

Consequently, a lot of computer people were becoming aware of the Internet. For the first time, they were able to access it for about the same price they'd pay to be a member of a BBS. There was only a handful of these sites, but demand for their service grew at an amazing rate.

The media also started to take notice of the "Internet thing" and the old story is repeated in the mainstream media. But the Net was still the domain of computer geeks, with the rest of the world on the outside looking in.

The reason the Internet didn't catch on with non-technical consumers was that users needed to know how to use Unix from the command line interface to get anything done. If you didn't have enough nerd points the Net was still too big and scary to use. About a year and a half ago, two technologies appeared on the scene that would attract the Internet to the rest of us — SLIP and HTTP.

## The first killer applications

Starts the Internet more people were using the Net for the same way they'd use a BBS. They'd use their terminal program. And, in web browsers.

## Cool Games

Protection from the blindingly fast T1 connection

Blushing cheeks from real time chat

Spines for use in the graphic Games Races

Weapon of choice for DOOM, Heretic, Tridown, and more!

Battlewound from the Majo Realm - the ultimate online role-playing game

## Serious NET

Confident gear of the master of his own domain?

Customer service available upon request

Scale of satisfaction from dealing with the best customer support in the business

All the information the Internet has to offer with full access links

Complete e-mail services (including Unix accounts)

**Contact ICE.NET:**  
[www.iceonline.com](http://www.iceonline.com)

Baltimore	202 PLAT	(708) (7047)
	296 SLIP	
Venice	480 1327	
Customer Support	482 7375	

\* FREE Web pages  
 • No busy signals  
 • Accounts from \$17 per month  
 • FLAT RATE for Internet

\*Some restrictions apply, call for details

Continued on page 98



# UNLIMITED INTERNET

**FREE  
Web  
Page**

## \$19.50



**FREE BOOK!**  
and 99¢ 1st Sign Up

## YOUR GATEWAY TO THE WORLD



- No Setup Fee
- No Hourly Charges
- Free Internet Software Kit
- Fast, Easy Access
- Free Technical Support
- Personal E-Mail Address

# 654-6088



**Internet Gateway Corp.**  
<http://www.intergate.bc.ca>



## Internet Daily News

# Dowco's Clients Speeding On Info Hwy Even Photo Radar Can't Keep Up With Dowco

## Dowco's Technology and Service Fastest in Industry



Highway Patrol Amazed at Speed

"Violators Show No  
Remorse," say Officials

### Things To Do Today

- ✓ Internet also means BUSINESS
- ✓ Go Global - Market Worldwide
- ✓ Reach 50 Million Consumers
- ✓ Get Volume Sales Online
- ✓ Profit from Technology
- ✓ Save on Long Distance
- ✓ E-Mail & Fax Savings
- ✓ Efficient & Cost Effective
- ✓ Save Time - Do More With Less
- ✓ Call Dowco from Dowco 800-337-3365
- ✓ Use Dowco Dial Up Service
- ✓ Dowco Does It All!!!
- ✓ Relax & Enjoy the Internet
- ✓ Relax & Enjoy the Good Life!

# DOWCO

"Your Solid Web Connection,"  
Now 25 years of Solid Service

Tune In To  
"The Internet Made Easy"  
Show On

**AM1040**

With Jonathan Reed - Saturdays  
11:00 AM until Noon

Flat Rate  
Dial Up Use

**\$19.<sup>95</sup>**  
Per Month

Dial Up  
Accounts  
From

**\$9.<sup>95</sup>**  
Per Month

Dial Up Use  
Plus Web Page

**\$29.<sup>95</sup>**  
Per Month

Call (604) 937-5505 or (604) 524-2736 Today & Plug In to [dowco.com](http://www.dowco.com)  
View our Web site at <http://www.dowco.com>

Let your cursor  
do the walking.



The BC TEL Yellow Pages™ are now on the Internet. And if you have a listing in the book, you'll also have a free listing at our Web site. Check it out at <http://www.bcyellowpages.com>. And to find out how your business can stand out, call us toll-free at 1-800-854-9919 (or 473-4931 in the Lower Mainland).

THINK  
YELLOW

# The sound of silent meetings

*A Montreal business school puts electronic meetings to the test*

BY ERIC HENNACHEZ

A group of employees, executives and non-parasitic gophers around the table of a meeting room at Montreal's elite business school, the HEC-HEC-Desautels Commerce School. The discussion focuses on the role and role of the meeting room in the meeting of the business world in the meeting of the world of electronic meetings.

These modern meetings put out loud, new ideas, suggestions, creative struggles in the face of the fast and ever-changing world of electronic meetings, and let you type everything instead.

In a meeting room it is out by the side

per side, they are automatically seated on the left, and lower-level employees are able to express their views openly, even if they are sitting next to the president.

"My people express their views on an equal footing," says Michel Gauthier, who is in charge of the meeting room at HEC, one of the best of its kind in Canada. To date, many groups have used the concept, including Hydro-Quebec, the City of Montreal, and IBM Montreal.

It looks like an ordinary meeting room except for the keyboard drawers in front of

each participant, and the monitors installed under the glass table so they don't block the participants' views.

The computers are linked to each other and a software package called Group Decision System takes care of managing and organizing the information automatically.

"One of the great advantages of this technology is that people do not need to take turns speaking," Gauthier explains. Everybody can "talk" at the same time and so ideas are put forward faster.

All ideas considered inappropriate or out

of context by the meeting participants are discarded, so time is not lost discussing these topics.

Last year, Michel Vachon, director of technical support at Montreal's leading development corporation, arranged electronic meetings for the city council.

"We put together sessions and decisions to discuss quality issues, after one electronic meeting, I saw how much work we would have in two or three traditional meetings," he says. "You can determine in advance

## Wanna Buy A Planet?

### Internet!



Use point and click software to become a part of the world's greatest information resource. View paintings at the Louvre, talk to far away friends, instantly send electronic mail anywhere in the world, order a CD, or battle it out with other players in interactive games.

At InfoMatch the emphasis is on usability, rather than connecting more users than we can accommodate. With each account we offer the following features:

- Each account has both PPP and Unix shell access.
- Full Uninet access including binaries and Client.
- Ability to publish your own WWW page free.
  - Global Electronic mail and chat.
  - Less than 20-1 User to machine ratio.

At InfoMatch we have over 4 years of experience with Internet software and services. Call us today or just login as our guest and ask for a 5 day complementary membership and see the future for yourself.

**infomatch**

INTERNET

Office: 421-3230

modem:

421-3277 421-0411

421-3896 421-3957

Email: [service@infomatch.com](mailto:service@infomatch.com)  
WWW: <http://infomatch.com>

## INTERNET ACCESS

Just  
\$16<sup>95</sup>/mo  
or less

All the time you'll  
ever need.

Free installation apply

Call **257-9400**

We'll connect you  
TODAY!

We're proud  
Supporter of



Montreal's  
first and largest  
Internet Access  
and Service Center



## INTERNET PORTAL

Phone: 257-9400  
Fax: 257-9400

Agencies and  
businesses worldwide

Inter  
*i*

Internet  
CANADA CORP.

**\$19.95** - The power of the Net for 20 hrs/mo., software included

- ▶ Instant access, no extra hook-up or hidden charges
- ▶ National service with local dial-up
- ▶ Make it your E-Mail address
- ▶ Full service web site marketing
- ▶ Unframed and yearly rates available
- ▶ 24 hour/7 day a week customer service

<http://www.ican.net>  
sales@ican.net

1-800-789-4226

## Power Plus in a 133 MHz Pentium

## Power Plus in a 133 MHz Pentium

We are on the brink of a way of change — industrially and culturally. While we may be able to use the technology that's coming down the pipe, we can't possibly predict how it will change society. □

This means that while the Freedom Projected system may command a lot of computer press attention in 1999, last year's dream machines will quietly be coming with it: the software PC user's work.

## FULL TIME INTERNET CONNECTION

# MORTIMER ONLINE!

A New World of Information, News and Fun!

## 'NEW FEATURE'

Log onto either Excelsior systems around the world using the Internet!

**MORTIMER ONLINE**

**AS LOW AS \$14.99 PER MONTH**

NO SET UP FOR NEW MODEM CHARGES

**MAIN MENU**

Home | News | Sports | Business | Entertainment | Health | Education | Technology | Arts & Culture | Travel | Food & Drink | Lifestyle | Classifieds | Search

News: Local, National, International  
Sports: Football, Basketball, Baseball, Hockey, Soccer, Tennis, Golf, Olympics  
Business: Finance, Economics, Markets, Industry News  
Entertainment: Movies, TV Shows, Music, Books, Comics  
Health: Diet, Fitness, Mental Health, Medical Advances  
Education: K-12, Higher Education, Research  
Technology: Computers, Internet, Software, Hardware  
Arts & Culture: Music, Visual Arts, Literature, Performing Arts  
Travel: Destinations, Travel Tips, Airlines, Hotels  
Food & Drink: Recipes, Restaurants, Food News  
Lifestyle: Fashion, Home Decor, Gardening, Pets

Home | News | Sports | Business | Entertainment | Health | Education | Technology | Arts & Culture | Travel | Food & Drink | Lifestyle | Classifieds | Search

- Windows Interface
- Point & Click
- Netscape, Eudora
- Email, Newsgroups
- WWW, FTP, etc.

## Modem 294-2955

Phone 294-2955  
Info@MortimerOnline.com  
http://www.MortimerOnline.com

120 - 2465 Beta Avenue Burnaby BC V5C 5N1

# DAF

**Infomaniac's  
Dial-A-File BBS  
& Internet Service Provider**  
Online since 1985

A cyber community where people connect

Get the full global connectivity of the net plus all the content of a BBS such as local discussion areas where members can meet and chat, huge file libraries, online games, news services and more.

## BBS

- \*Huge File Libraries
- \*Echomail
- \*News Services
- \*Online Games
- \*Live Conferencing
- \*Local Discussion Areas

## Internet

- \*Email
- \*FTP
- \*Telnet
- \*IRC (Internet Chat)
- \*World Wide Web
- \*Slip Connections

BBS-Only accounts from \$4.95/month based on \$49.95 annual rate  
BBS/Internet accounts from \$8.95/month based on \$109.95 annual rate

To Connect to Dial-A-File use your modem to call:  
736-FILE, 738-5688, 738-2445 (14.4Kbps)  
or 738-FILE (28.8Kbps)

Information and Tech Support: 737-1580  
Box 174 - 218 West Broadway, Vancouver, BC V6Z 4C6



# DEEP COVE

<http://www.deepcove.com/>

## New Years Specials:

- "Power Reader" Internet Accounts for \$10.95/year (120 hours)
- Casual 3RS membership Includes Internet access \$20
- Up to 50% reduction on all membership and Internet services
- "Student" 3RS package at \$10.95 - bring your student card!
- "Internet Master" 1200 1200 PPP, 1200 and 1200 \$20

## Corporate Web?

- Outstanding prices for all Corporate contracts and WHOLE sales
- "Master" Server prices that the competition can't match

## Every-Day Services

- Customizing Tech Support for BBS, Windows, Mac, Linux
- Saturday and extended Tech Support hours on Tue and Thu
- 64-hour 3RS System (1200) #1 as Canada by Review of Research Magazine



MO 1200-  
536-5688 or  
536-5688

Tel:  
541-2020

Fax:  
536-7418



Deep Cove is 100% S.C. Owned and Operated

# GO ONLINE WITH LYNX UNLIMITED ACCESS

## A INSTANT ACCOUNT ACTIVATION

FLAT RATE NO HOURLY CHARGES

ONLY \$20.00 PER MONTH

PROFESSIONAL WEB PAGE DESIGN

SLIP & PPP CONNECTION

FULL NEWS FEED

ALL 28.8 K LINES

T1 CONNECTION

ASK FOR OUR STUDENT DISCOUNT PACKAGE

PUT YOUR BUSINESS ON THE NET!

# LYNX INTERNET

Makes It So Easy!

Phone: 331-2511 Fax: 331-2522  
E-Mail: [info@lynx.bc.ca](mailto:info@lynx.bc.ca)

# Mentorom Multimedia: Educational substance along with style

BY JEFF EVANS

It's not often in the interactive CD-ROM field, let alone outstanding educational series that stand out as exceptional products that show promise but deliver a fairly blabby result in terms of real educational content.

A relative handful of companies have an extensive track record and a large catalog of interactive educational titles for children. Blackboard, MRC, Davidson, and Associates and Compuserve all have well-deserved reputations as quality legends. Somewhat to our surprise, their newest CD-ROMs, which offer a full range of excellent quality, well-paced and well-produced educational CD-ROMs.

## Only in English, Eh? Well, Not Any More

The recent Mentorom has been a well-kept secret in Canada until recently is that the growth of this educational series was in English. Canadians are being treated to the possibility that much of what seems to have been years of hard work developing these titles for the French market.

The resulting CDs are actually very usable multimedias. "Goodbye" They are not, yet,

available for reference use, or for those learning French in a "classroom" CD-ROM which are available (plus with fragments of education) available to the few who believe in bilingual. A large amount of the bilingual titles feature a large amount of real reference content with pictures, video clips, more information, and appealing user interfaces.

## The Subjects

The CD-ROMs offer me cover some of the most interesting subject areas. The Science and Nature series includes Geography (world, continents, rivers, land and sea) and evolution, as well as Climate Change and Pollution. Research.

There are also original titles presented by presenting case studies from the real world. The user interfaces allow the student to access different major topics by pointing and clicking, though you can cross-reference facts and concepts (ability and there are on-screen options to get understanding of facts and concepts of facts).

Two physical series titles on Science and Nature, should be of great appeal to young people interested in how the world around them is constructed. The user-built series are also available, and have been constructed

are identified, changed and used.

There are two language titles, French, English, and Spanish. In French, which was the first series developed by the CD-ROM to be used in the real world, and spoken examples of the two languages.

As a result, the French title on World War II (which proved also covered by many other CD-ROMs on the topic) but does it fairly and well.



Really, Civilization: Religions of the World title is a very good comprehensive overview of the world's great religions.

This line of educational CD-ROMs is not all the way for me could reasonably expect school and public library to stock, and every family PC owner to consider for his or her own CD-ROM collection. **A**

David, Mentorom Multimedia, 333-474-3333

## Does Your Office Have:

- Microsoft Mail?
- Lotus cc:Mail?
- Novell GroupWise?



## Do You Want to Communicate with the World Through the Internet?

Whether your organization has 7 users or 700, we have an inexpensive and easy-to-manage way for you to connect your LAN E-mail to the Internet - without complex gateways or connections! Our delighted customers include:

- Richmond Savings
- White Spot Limited
- Ebbett Engineering Pacific Ltd.
- Seaway International
- Orca Bay Systems and Communications
- BC Box House
- Assoc of R.C. Professional Personnel
- Canadian Depreciation Association Corp.

The ECTHC Mail Company Inc.

One of the ECTHC Mail Solutions

Phone: (604) 443-4444 Fax: (604) 443-4444

Web: [www.ecthc.com](http://www.ecthc.com)

Copyright © 1996 ECTHC Mail Company Inc. All Rights Reserved.

## Make Your Connection to Tomorrow's Gigabyte Highway Today ISP's



Now providing you with Fiber Optic Connection to the WEB, Vancouver to Seattle. Break through Competitive Pricing, increased Bandwidth, OC48 Capacity to meet all future needs between Canada & USA. Ask us about trial bandwidth, to take on some of those newer accounts.

Keep Your Commercial Accounts Happy!

888 West Hastings Street, Suite 2070 Vancouver, B.C. Canada V6B 4N5

Telephone (604) 681-4400 Fax: (604) 681-4400

2001 South Avenue Suite 1000 Seattle, Washington, USA 98121

Telephone (206) 448-4334 Fax: (206) 448-4334





dictionary will present a list of the 20 five-letter words in its database ending in "tzt." Data about its usage is double-coded on the same prompts as definition is suit of suit with word also includes a limited-function anagram generator.

CDX says that you can use the dictionary/thesaurus by itself or in conjunction with a word processor or other application, and while that's true, it's a damn handy word's companion. The integration of word answers to the ability to print a word doc-

ument word processor with the handy features of the CD-ROM and back again. There's no way to see the level of integration via a list with something like Microsoft Word. The benefit of the dictionary itself may depend on an available from within Word as a menu item.

I saw the American Heritage Dictionary for OS/2 at a local computer store for \$19, which seems a bit expensive. By comparison, you can now buy Microsoft's Word 95 which includes the American Heritage

Dictionary, Roget's II Thesaurus and a bunch of other references all in a nice multimedia package, for less. And you could also buy a separate paper dictionary and thesaurus for less than \$10. If you have a help, and you're the type who is constantly reaching for that dictionary and thesaurus on your desktop, you'll likely find the convenience of the online version to be quite compelling.

Contact: Don Williams, 617-475-1100

## Guiding kids through the Net

Children, from page 90



Any kid researching a school project will be able to find interesting sites where they can write to astronauts learn about people from around the world, or learn all about volcanoes.

With a little where they can find to the content of the site, the book helps children and parents understand the workings of the Internet and the World Wide Web with the idea of finding fun and interesting sites for children to play with, while looking to some education at the same time.

The first section of the book tells parents what the Internet is, what it is, and how they can help guide their children as they use it. It also tells them about "parental controls" because about the Internet, such as not giving out name or address and possibly being asked when dealing with adults. Then the book tells about any kid searching a school project will be able to find educational sites where they can write to astronauts, learn about people from around the world, or learn all about volcanoes.

There are also plenty of great ideas for using the Internet, including fun, learning, and finding out what your name means in a different language, or even the history of the Internet.

For kids who are looking for a book to read, this book is a great one to read. It's not too long, and it's easy to read. It's a book that kids can read with their parents.

The price and content of this book is that there is not enough of it. It is only a matter of time before other professional publishing houses notice on the idea and give it the sort of broad coverage it is due. In the meantime, if you're looking for a book to read, this book is a great one to read. It's not too long, and it's easy to read. It's a book that kids can read with their parents.

**NOTE:**  
Information on the book is available from the publisher, Children's Press, 1000  
1000  
1000

Children's Press, 1000 1000  
1000 1000 1000 1000

## Making the Internet a Family Affair!



### E-Z Net Internet Services Ltd.

A Direct Net Technologies Company  
<http://www.direct.ca>

#### The E-Z Net 10-Point Statement

E-Z Net is a provider of high-quality, competitively-priced Internet access and support services. Our services are aimed at helping users of the Internet in their homes and businesses, as well as in schools and universities. We are committed to providing the best possible service to our customers.

#### What Makes Us Different?

1. **Choice.** E-Z Net offers two types of Internet access: Full Net and Family Net. If you desire standard Internet access with no restrictions at all, Full Net is for you. Family Net, our showcase offering, is Internet access that we help provide to our customers at an affordable rate. Family Net is a service that we offer to our customers at an affordable rate. It is a service that we offer to our customers at an affordable rate. It is a service that we offer to our customers at an affordable rate.
2. **Services.** To complement your choice of access, here at E-Z Net for comprehensive support services. The Internet is an exciting place, but getting connected and navigating your way around isn't always intuitive. That's why we offer a variety of services to our customers. We offer a variety of services to our customers. We offer a variety of services to our customers. We offer a variety of services to our customers.
3. **A Complete Solution.** E-Z Net has selected from the hundreds of software packages available, a suite of premium programs we recommend to our customers and simplify the Internet experience. The software we have selected is a complete solution. It is a complete solution. It is a complete solution. It is a complete solution.
4. **Value.** The amount of media attention and advertising surrounding the Internet makes it quite confusing as to who you should trust to "get connected." The good news is that the Internet is old enough now to make shopping for it a little easier. The bad news is that you get what you pay for. The good news is that the Internet is old enough now to make shopping for it a little easier. The bad news is that you get what you pay for.
5. **People.** E-Z Net's staff is made up of people who are passionate about the Internet. They are passionate about the Internet. They are passionate about the Internet. They are passionate about the Internet.

For more information, brochures, or rates, call E-Z Net at (800) 675-8403, or (800) 675-8403.

...Internet Access for the Rest of Us!

### SmarttISDN

uses Sandalf's  
iPressConnect S842s  
Routers with their  
patented 6.3 Data  
Compression for  
throughput of up to 1  
Mbps!

Surfin' without Water?!



**NOT**

# SmarttNet

Attention  
Corporations

## Presents SmarttISDN

- 2 B-Channel (128 K)
- Full Internet access
- All ISDN related Equipment will be provided by SmarttISDN
- No set up charge
- Only \$339/month

It's TIME TO MAKE IT

**isdn@smartt.com**

So don't surf without

## SmarttNet

- Only \$20/mth
- No set-up fee
- Free starter kit
- Free 2 hours classroom training on Internet for beginners
- PPP/SLIP dial up service, E-mail address, WWW access, News Group access

It's TIME TO MAKE IT

**easy@smartt.com**

**Call today (604) 473-9700**

## We Are Thinking Ahead

#114-3655 Henning Drive, Burnaby, BC, V5C 6N3

**BCTEL**  
Advanced Communications  
Network Partner

**ZED**  
DATA SYSTEMS  
CORP.  
THE NETWORK EXPERTS





# More Byte Than Bark.

**INTRODUCING BUSINESS INTERNET** Internet, e-mail and the World Wide Web. For business users it's been as much noise. Until now. Now the Internet is accessible to everyone in your office with the speed business needs and the security business demands. And it's all available - hardware, software, connectivity and services - from a single source you already know and depend on, BCTEL Advanced Communications. Our Business Internet offers a complete turnkey approach to linking your company's internal information network to the world out.

#### Leader of the Pack.

Our Business Internet starts with a connection several times faster than any modem. What's more, many users in your office can be online at once. And that speed and capability can be yours without an investment in new hardware. We include high speed access, ensure you a dedicated link to the Internet, even provide the necessary router that plugs into a port on your LAN. All part of the package.

#### Handled in a Bitch.

We can also handle all registration procedures to connect your people to the Internet. We'll explain the set-up procedure, even do some configuration for you. And our training can get everyone in your company up to speed with the World Wide Web, e-mail, groups, word processing and more.

#### Bit, Mail, Chat, and More.

Beyond the basics, we offer a host of added services - all from a single source. We'll help you build a more powerful Internet capability at your site - or ours - including complex e-mail management and electronic commerce. We can even host your company's online communications, real - or web time. You can do your own pages or use our designers to create linked image maps, on-line response forms, even voice mail and more. Every trick of the trade.

#### Growing Deeper?

We think of all the money as you don't have it. We even make sure your LAN and business discussions are secure - with an extensive collection of options - from passwords and filters to hidden mailing - to keep your LAN from prying eyes.

#### Well Dealed.

You want details. It's the best way to do that is to spend a few hours with us in a Business Internet session. There's no charge, no obligation, just a world of opportunities awaiting you. For seminar information just give us a call or check our current schedule on line.

Lower Mainland: 454-1447  
**1-800-851-0904**  
<http://www.bctel.net/biz>



**Advanced Communications  
Business Internet**

**FAST. SMART. LOYAL. AND WE LISTEN.**



# Windows 95 keyboard shortcuts

## Breaking the cycle of mouse dependency

BY BOB LAMIRAND

One of the ways you can give a power user a big name with his or her use of the computer is making sure the real computer user from the enterprise workplace most clearly then apply with the idea back.

A power or intermediate user will focus more with the experience of the user a key-based policy components in cutting work and jumping from application to application. Windows takes the desktop, app windows, file or drive — a quick guide, a download, some to the personal information man app (PIM) and all with the press of a few well-chosen keys.

Keyboard shortcuts place you in the next level of computing.

Don't get me wrong — the mouse is a wonderful thing. The world has chosen the graphical user interface and in this world, the mouse is at the heart of the system. The mouse is our friend! Until the user who starts and the 40-inch work screen come into the line, the mouse and its inverted cone of control ball are here to stay.

However, over-reliance on the mouse is the sign of the mouse user. Here, there are a few of the benefits of keyboard commands for Windows 95, and a few for the more complex Windows applications.

**The very basics (Ctrl-C — Copy, Ctrl-V — Paste, Ctrl-E — Edit and Ctrl-Z — Undo)**

Let's take a very common example. You are writing a letter on your word processor and you want to get an address from your PDB to place at the top of the letter.

If you are a novice, you will probably press your mouse, bring a down to the Task Bar, click on Start and find your way up and down through the PDB Index, PDB and click to launch the application.

Now that the PDB is open, you select the data, choose Edit/Copy, go to the Task Bar and return to your word processor, click on the document and select Edit/Paste.

All of the time you might find a desktop or a screen about your left hand is doing nothing (assuming you're right-handed). This procedure could be greatly speeded up by the following.

After you've selected the text to be copied, highlight it with the mouse. In the command (Ctrl) key and while it is still depressed, hit the C key. You've just copied that data that was highlighted.

Now, get back into your word processor, click the cursor in the position you want the data inserted. Now hit Ctrl-V and you've moved the data you previously copied.

Repeat with the Ctrl and Ctrl-Z, Ctrl-E, paste cut. This is an efficient way to get out of something but it is easier to hit the delete key if you are using something. The value of Ctrl-E is that it allows the user to also copy it. Now you've done an exercise in a document or spreadsheet and use your hand Ctrl-V to paste what was cut into a new location.

It's true that your word processor may

allow you to simply drag and drop selected text to a new location, but Ctrl-V works

throughout Windows 95 and 40. It is applicable to a useful keyboard combo.

Continued on page 174

## Give your Business a Lift...

### Your

company is on the move to Microsoft® Windows 95™ and Windows NT™ and your staff needs training to maximize Microsoft's potential.

Call triOS. We offer:

- ▶ authorized instruction
- ▶ certified programs
- ▶ high quality facilities
- ▶ triOS® Leaders in Certification® guarantee
- ▶ customized programs

**BUY ONE  
COURSE AND  
GET THE NEXT  
AT HALF  
PRICE®**

## ...with Microsoft's Authorized Technical Education. Call 604-482-8646

triOS Training consultants can help you customize your company's training needs. Call today to get our full catalogue.

**Introductory Special.**  
Call Kevin Cuddehe for details.

**Internet: sales@trios.ca**

**Microsoft®  
Authorized Provider**  
Authorized Technical  
Education Center

**triOS®  
Training Centres**  
Leaders in Client Care

Microsoft, Windows 95, Windows NT, and triOS are registered trademarks of Microsoft Corporation. triOS is a trademark of triOS Corporation.

# Productivity POINT

The Point Is Time!

**PPI OFFERS MICROSOFT  
CSE BUNDLE PACKAGE**  
3 COURSES + 12027-57007 FOR ONLY \$6995!

COURSE TITLE	FEB	MAR	APR	PRICE
Implementing MS SQL 6.5	-	-	8-11	\$1 675
Application Development using Access 2.0	-	-	-	\$1 600
Implementation of MS Visual Basic 4.0	-	10-18	-	\$1 125
Programming with MS Visual Basic 4.0	-	26-28	-	\$1 675
Implementing MS TOPIC on Windows NT 3.5	21-23	-	-	\$1 125
MS Windows Operating Systems & Services Architecture	10-18	-	20-26	\$1 500
Supporting Microsoft Systems & Services 3.01	-	-	24-30	\$1 125
Systems Administrator for MS SQL Server 6.0	-	4-8	-	\$1 675
Supporting Microsoft Windows NT 3.51	-	15-19	-	\$2 125
Fundamentals of Microsoft Exchange Server 5.0/5.5	10-20	-	26-30	\$1 675
Supporting Microsoft Windows 95	-	10-22	-	\$1 125
Installing & Configuring Microsoft Windows 95	-	10-22	-	\$1 675
Application Development using Excel to MS SQL with VBA	4-8	-	15-19	\$250
Implementing a Database Design in MS SQL Server 6.0	-	4-8	-	\$1 675
Supporting MS Systems Management Server 1.1	20-1	-	10-15	\$1 675

PPI is an authorized Sybex  
Proactive Training Center  
TAKE YOUR EXAMS WITH US!

**Microsoft**  
Authorized Solution  
Education Center

Visit our Web Site:  
[www.ppi.com](http://www.ppi.com)

Vancouver  
Tel: 604-5000 Fax: 604-5001  
20th Floor, 1885 W. Georgia St.

## Don't Miss the Premium Training Opportunity of the Year!

The 29th ANNUAL  
**DECUS Canada Symposium**  
February 26 to March 1, 1996  
Hyatt Regency, VANCOUVER, B.C.

A training opportunity for people facing the  
challenges of today's converging technologies

- ▲ Internet Technologies
- ▲ Personal Computing
- ▲ Windows NT
- ▲ Network Management
- ▲ Enterprise Computing
- ▲ And so much more!

Digital Equipment Computer Open Society (DECUS) Canada's largest user group, plays host to the most comprehensive industry event of the year. This year, get an unprecedented look at the emerging applications and future technologies of Digital equipment of Canada at DECUS exhibitors. This event will introduce attendees on some of the most critical issues facing technology managers and corporate users today. The network will follow IT professionals from all across Canada. Best of all, attend at the Inland City - the hottest spot at the show.

Celebrate DECUS 35th anniversary with us!  
Get in on exclusive product and service offers.



For further information call (416) 218-2181 or [info@decus.ca](mailto:info@decus.ca)  
Or check out the DECUS Canada Web site at <http://www.decus.ca>

## ERGONOMICS

# The human factor Getting real people involved in the computer design process

BY ROSE MACDONALD

Despite what you may have heard, thought, or suspected, there's a little bit of psychology in every computer user interface. — the science of designing things to best accommodate human behaviour and the human body — is at the heart of the computer industry these days as the computer itself gradually evolves from a business case into a household appliance as common as the VCR.

Last July, but more accurately this "September" perhaps, is the term "human factors" which roughly translates into usability. And it's plain old "human factors" that the major computer makers focus their efforts toward making their machines physically friendlier. Virtually all major manufacturers have such facilities, but

Compaq's is one of the most elaborate. Working from a fifth floor suite over a bank in Montreal, Que., you'll find the greater part of a compact car and the lower parts of "test-subjects" without seats. Poking your nose through rubber doors leads to a laboratory where a living model sitting and so forth.

All of these considerations help Compaq's design team predict just how "usable" any new ideas and designs might be.

Can a new portable be used comfortably on the back seat of a car? Can you read the screen at night despite? Is the pointing device in a convenient place? And how about those awkward mouse? Does the scrolling wheel at a comfortable angle? Is the carrying case too heavy or open in such a tight space?

## AIMBRIDGE® Education Centre

Tomorrow's Training for  
Today's Jobs

Whatever your age  
Whether you're a complete beginner  
or a high flyer  
We have a course designed for you!

- Introduction to Computers
- Introduction to Programming
- Introduction to Databases
- MS-DOS: Windows 3.1 and 95
- Word and WordPerfect Processors
- Access and Paradox Databases
- Excel and Quattro Spreadsheet
- Visual Basic, Pascal, C, C++, HTML
- Internet
- ACCPAC Plus Accounting
- ESL

Tel: (604) 451-1000  
Fax: (604) 451-0680  
3121 Kingsway, Vancouver, BC,  
Canada V6R 1J9









## BC EDITION THE COMPUTER PAGE FEBRUARY 1986 111





## USER GROUPS

ATTENTION USER GROUPS: Deadline for completion of the attached form is March 15, 1986. Information for inclusion in the May issue. The Computer Fair will accept no responsibility for omissions or errors.

ALBERTA COMPUTER SOCIETY, 1001-1100  
1001-1100, 1001-1100, 1001-1100

ALBERTA COMPUTER SOCIETY, 1001-1100  
1001-1100, 1001-1100, 1001-1100

ALBERTA COMPUTER SOCIETY, 1001-1100  
1001-1100, 1001-1100, 1001-1100

ALBERTA COMPUTER SOCIETY, 1001-1100  
1001-1100, 1001-1100, 1001-1100

ALBERTA COMPUTER SOCIETY, 1001-1100

ALBERTA COMPUTER SOCIETY, 1001-1100  
1001-1100, 1001-1100, 1001-1100

ALBERTA COMPUTER SOCIETY, 1001-1100  
1001-1100, 1001-1100, 1001-1100

ALBERTA COMPUTER SOCIETY, 1001-1100  
1001-1100, 1001-1100, 1001-1100

ALBERTA COMPUTER SOCIETY, 1001-1100  
1001-1100, 1001-1100, 1001-1100

ALBERTA COMPUTER SOCIETY, 1001-1100

ALBERTA COMPUTER SOCIETY, 1001-1100  
1001-1100, 1001-1100, 1001-1100

ALBERTA COMPUTER SOCIETY, 1001-1100  
1001-1100, 1001-1100, 1001-1100

ALBERTA COMPUTER SOCIETY, 1001-1100  
1001-1100, 1001-1100, 1001-1100

ALBERTA COMPUTER SOCIETY, 1001-1100  
1001-1100, 1001-1100, 1001-1100

ALBERTA COMPUTER SOCIETY, 1001-1100  
1001-1100, 1001-1100, 1001-1100

ALBERTA COMPUTER SOCIETY, 1001-1100  
1001-1100, 1001-1100, 1001-1100

ALBERTA COMPUTER SOCIETY, 1001-1100  
1001-1100, 1001-1100, 1001-1100

ALBERTA COMPUTER SOCIETY, 1001-1100  
1001-1100, 1001-1100, 1001-1100

# Computer Fair

**Saturday  
February 17,  
10:00am-4:00pm**

**MacPherson Convention Centre  
7325 McPherson Ave., Burnaby, BC**

**Home Entertainment Section**  
Absolutely the lowest prices  
on Name Brand Televisions,  
Video Recorders, Stereos,  
Speakers, CD Players, Laser  
Disk Players, Cassette  
Recorders etc.

**One Day  
Only**

**Over 55 Vendors  
New & Used Computers,  
Software, Printers, Hard  
Drives, Scanners, CDR  
ROMs, Multimedia Kits,  
Peripherals, Books  
and much more.**  
**Clearout sales on all  
70% off Software  
60% off books**

**Lots of FREE parking**

**Admission**

**Adults \$6  
Students \$5  
Seniors \$5  
Children FREE  
(Under 12 with an adult)**

**Sponsored By  
CANADA  
COMPUTES**

**\$1 OFF**

Bring this ad and  
receive a \$1 discount  
on the regular admission.  
One discount per  
person. Not valid with  
any other discount.



For information or  
advance reservations call  
**275-4991**

**7 Years Same Location**



ALBERTA COMPUTER SOCIETY, 1001-1100  
1001-1100, 1001-1100, 1001-1100

ALBERTA COMPUTER SOCIETY, 1001-1100  
1001-1100, 1001-1100, 1001-1100

ALBERTA COMPUTER SOCIETY, 1001-1100  
1001-1100, 1001-1100, 1001-1100

ALBERTA COMPUTER SOCIETY, 1001-1100  
1001-1100, 1001-1100, 1001-1100

ALBERTA COMPUTER SOCIETY, 1001-1100  
1001-1100, 1001-1100, 1001-1100

ALBERTA COMPUTER SOCIETY, 1001-1100  
1001-1100, 1001-1100, 1001-1100

ALBERTA COMPUTER SOCIETY, 1001-1100  
1001-1100, 1001-1100, 1001-1100

ALBERTA COMPUTER SOCIETY, 1001-1100  
1001-1100, 1001-1100, 1001-1100

ALBERTA COMPUTER SOCIETY, 1001-1100  
1001-1100, 1001-1100, 1001-1100

ALBERTA COMPUTER SOCIETY, 1001-1100  
1001-1100, 1001-1100, 1001-1100

ALBERTA COMPUTER SOCIETY, 1001-1100  
1001-1100, 1001-1100, 1001-1100

ALBERTA COMPUTER SOCIETY, 1001-1100  
1001-1100, 1001-1100, 1001-1100

ALBERTA COMPUTER SOCIETY, 1001-1100  
1001-1100, 1001-1100, 1001-1100

ALBERTA COMPUTER SOCIETY, 1001-1100  
1001-1100, 1001-1100, 1001-1100

ALBERTA COMPUTER SOCIETY, 1001-1100  
1001-1100, 1001-1100, 1001-1100

ALBERTA COMPUTER SOCIETY, 1001-1100  
1001-1100, 1001-1100, 1001-1100









Our specialty is...

## COMPAQ

Authorized Reseller of the American Computer Company

We buy and sell used computers  
We sell new and used spare parts  
We sell new end of production PC's

COMPAQ Notebook Upgrade Specialists

- ☐ Notebooks (416) 975-4500  
LTD Ltd  
Coffey 408  
Rm  
240 Dupont Street  
Toronto 1st Spadina
- ☐ Desktops PC Outlet  
Authorized COMPAQ  
Repair Centre
- ☐ Servers

INTERNET EMAIL - goodlink@pcoutlet.com  
WEB Site: <http://www.pcoutlet.com/pcoutlet>

### Byte Computers

Authorized Dealer  
Let us be your system manager.  
Complete Apple Services  
• Support Services and Network  
Management  
• Personalized one-on-one training  
• Special on-site computer services  
For details call Dave (416) 734-7347  
dave@bytecomputers.com



### DRAW Module

Graphics & Production

On board drawing & plotterboard service  
20/72 pins DAW assembly service  
Basic PCB & Parts ship out  
24 hours turn around  
Free Quotation  
SVC/Free Info/Revised

See 7323 334-8442 Tel: 416-334-0200



### Cleaning & Maintenance Specialists

• 15 years computer experience -  
• 3rd party repair service available -  
• Next day service available -

### C.A.R.E. COMPUTERS

Unit 1, 1247 W. Beaverline  
Vancouver BC, V6L 1Y6 Tel: 734-4433  
After Hours Call: 734-4433  
733-CARE (3273)

### SIMM MODULE

30 Pins &  
72 Pins

1GBL  
-386  
387/387-2



### MEMORY HOUSE INC.

1070 11TH Avenue West  
Edmonton, AB T6E 2E2  
Phone: (416) 778-7107 Fax: (416) 778-7107

### INTERNET MADE EASY

IN HOME INSTALLATION

- software installation
- computer set-up
- free 1 hour consultation

540-1250

### INKJET RE-INKING

Professional Inkjet Refill Service  
We provide a wide range of services for all inkjet printers. We use only the highest quality ink and cartridges. Our service is fast, reliable and affordable. We will be happy to assist you with any inkjet printer problems. We will be happy to assist you with any inkjet printer problems. We will be happy to assist you with any inkjet printer problems.

Canadian Labels Services  
870-888 W. Beaverline  
Vancouver BC, V6L 1Y6



### COMPUTER BATTERIES & MORE

Batteries for laptops, PDAs, MP3 players, cameras, etc.  
We have a wide range of batteries for all your electronic devices. We will be happy to assist you with any battery problems. We will be happy to assist you with any battery problems. We will be happy to assist you with any battery problems.

### BATTERY EXPRESS

2140 Steeles Ave. East, Unit 10, Scarborough, ON M1V 5P4  
Tel: (416) 291-1111 Fax: (416) 291-1111

### ADVERTISE



COMPUTER PAPER

RATES FOR AN AD THIS SIZE PER COPY ARE:  
1 ISSUE... \$1.40 4 ISSUES... \$5.20  
3 ISSUES... \$3.20 12 ISSUES... \$17.20

OUR EST. APPROX. NET 10%



February 10 & 11, 1998

### GIVE SOMEONE A SECOND CHANCE.

Please give generously



THE EDWIN TOLSON FOUNDATION OF CANADA

## broaden your horizons

pick up your free copy of  
at these fine locations...



■ also available at your local computer store  
■ call 733-5596 for more information  
Canada Computes is published by Canada Computer Paper



Also At:

- Extra Foods
- Super Vale
- Shoppers Drug Mart
- ISA
- Food Stops



SAVE-ON-FOODS & DRUGS

Superstore







# DAIWA

DAIWA DISTRIBUTION INC.  
Unit 11, 13520 Creechwood Place,  
Richmond B.C. V6V 2G3  
Tel: (604) 266-9912 Fax: (604) 266-9986  
EMAIL: Daiwa@PORTAL.CA

**Dealers  
Wanted**

145 WINDOWS 3.11  
AVAILABLE

Internet READY!  
1.44K Floppy Modem  
For \$95



## The Power System

Pentium™ 100/120/133

- Pentium 100 Mother Board 25MB Cache
- 16MB RAM 8MB Cache
- 100MHz 8000 Floppy Drive
- 800MHz PCI Modem
- All built on PCI 66MHz Adapter with 1MB 256KB
- 2241 PCI Hard Bus 8000 Controller
- 640MB 137MB 32GBA Hard Bus 133MHz
- 12" 14" 16" Screen Card
- 2x 16000 Fast Serial 1 Parallel
- Logitech 3-Button Mouse
- Two Year Parts & Labour Warranty

Triton

AI

AI

AI

AI

AI

AI

AI

AI

AI

AI

AI

AI

AI

AI

AI

AI

AI

AI

AI

AI

AI

AI

AI

AI

AI

AI

AI

AI

1" DAYTEK Monitor included

Upgrade with Quick Speed CD Rom - \$229.95  
or 16 MB Sound Card & Speakers

from \$2225

from \$2355

from \$2575

## 486DX4-100 PCI Multimedia System



2X  
CD ROM KIT

AI

AI

AI

AI

AI

AI

AI

AI

AI

AI

AI

AI

AI

AI

AI

AI

AI

AI

AI

AI

AI

AI

AI

- 486DX4 100MHz PCI Mother Board with CPU & Cooling Fan
- 25MB Cache
- 486DX4 PCI Modem Adapter
- 1.44MB Floppy Drive
- 800MHz PCI Modem
- 2241 PCI Hard Bus 8000 Controller
- 640MB 137MB 32GBA Hard Bus 133MHz
- 12" 14" 16" Screen Card
- 2x 16000 Fast Serial 1 Parallel
- Logitech 3-Button Mouse
- Two Year Parts & Labour Warranty

1" DAYTEK Monitor included

Upgrade with Quick Speed CD ROM - \$95.95

\$1355

## Daiwa 5x86 System

NEW

AI

AI

AI

AI

AI

AI

AI

AI

AI

AI

AI

AI

AI

AI

AI

AI

AI

AI

AI

AI

AI

AI

AI

AI

AI

- 486DX4 100MHz PCI Mother Board with CPU & Cooling Fan
- 25MB Cache
- 486DX4 PCI Modem Adapter
- 1.44MB Floppy Drive
- 800MHz PCI Modem
- 2241 PCI Hard Bus 8000 Controller
- 640MB 137MB 32GBA Hard Bus 133MHz
- 12" 14" 16" Screen Card
- 2x 16000 Fast Serial 1 Parallel
- Logitech 3-Button Mouse
- Two Year Parts & Labour Warranty

1" DAYTEK Monitor included

Upgrade with Quick Speed CD ROM - \$229.95  
or 16 MB Sound Card & Speakers

from \$1335

from \$1395

hp HEWLETT  
PACKARD



**HP DeskJet 400C**  
The Home Printer with  
Easy-to-Use Setup

- Up to 4 pages per minute
- 400C Multifunction
- Document Technology



**HP DeskJet 400C**  
The Home Printer with  
Easy-to-Use Setup

- Up to 4 pages per minute
- 400C Multifunction
- Document Technology



**HP DeskJet 400C**  
The Home Printer with  
Easy-to-Use Setup

- Up to 4 pages per minute
- 400C Multifunction
- Document Technology



**HP LaserJet 34**  
The Home Laser Printer  
for Small Groups

- True 600 dpi
- Approx. 100 pages in 10 minutes
- 100 pages in 10 minutes



**HP LaserJet 34**  
The Home Laser Printer  
for Small Groups

- True 600 dpi
- Approx. 100 pages in 10 minutes
- 100 pages in 10 minutes



**HP LaserJet 34**  
The Home Laser Printer  
for Small Groups

- True 600 dpi
- Approx. 100 pages in 10 minutes
- 100 pages in 10 minutes

## Daiwa Pentium System

Pentium™ 75/100/120

- Pentium 75 Mother Board 25MB Cache
- 8MB RAM, Upgrade to 128MB
- 100MHz 8000 Floppy Drive
- 100MHz PCI Modem
- 800MHz PCI Modem
- 2241 PCI Hard Bus 8000 Controller
- 640MB 137MB 32GBA Hard Bus 133MHz
- 12" 14" 16" Screen Card
- 2x 16000 Fast Serial 1 Parallel
- Logitech 3-Button Mouse
- Two Year Parts & Labour Warranty

pentium

AI

AI

AI

AI

AI

1" DAYTEK Monitor included

Upgrade with Quick Speed CD ROM - \$229.95  
or 16 MB Sound Card & Speakers

from \$1495

from \$1655

from \$1765

## Index of Advertisers

[illegible]

## Free 14.4k Data/Faxmodem

## P100 MPC

- Intel Pentium 100 processor
- PCI local bus slots • EMM RAM
- 1Gigabyte hard drive
- 3.5" floppy drive
- Quad (4x) speed CD ROM drive
- Upgrade to 6x Speed CD-Rom S18
- Dual shielded multimedia speakers
- 1MB PCI SVGA video card
- 16-Bit Stereo sound card & 14.4K Data/Fax/modem
- 14" Non-Interlaced monitor .28dp
- Parallel / 2 • 16550 Serial Ports
- Windows '95 & Mouse • 3 Yr Ltd Warranty

CCL P100 MPC

**\$1888**



pentium



Summe der Vacanzstellen je Gruppe

## P120 MPC

- Intel Pentium III 550 processor
- PCI local bus slots + 8MB EDO RAM
- Upgradable to 256K Pipeline burst cache
- 1Gigabyte hard drive + 2.5" floppy drive
- Quad (x4) speed CD-ROM drive
- Upgrade to 8x Speed CD-Rom 588
- Quiet shielded multimedia speakers
- 1985 PCI SVGA video card
- 16-Bit Stereo sound card + 14.4K Data/Fax/modem
- 14" SVGA monitor 21dp, 1024x768
- 1 Parallel / 2 - 16550 Serial Ports
- Windows 95 & Mouse + 3 Yr Ltd Warranty

CCL P120 MPC

**\$2048**

**RECEIVE COMPTON'S '96  
CD-ROM ENCYCLOPEDIA**  
has paid by Cash/Bank draft / Interac

how paid by Cash, Bank draft / Interest

Upgrade to 1x Speed  
CD-Rom drive  
above systems \$88

**4PUS**

UBC	SURREY	COQUITLAM	VICTORIA
202 Pacific Highway FAX 228-6338	9847-760 King George Hwy FAX 604-591-0338	4800-100 Columbia House FAX 517-8380	4100-5200 Bridge Rd FAX 520-8838
<b>228-8080</b>	<b>501-0328</b>	<b>517-8080</b>	<b>920-9826</b>

© 2006 Blackwell Publishing Ltd, *Journal of Internal Medicine* 260: 395–402

green.

Thinking is green? Then get this—the \$625 printer you sell will generate over \$7,000 in additional sales if you simply focus on the supplies. Learn more about the \$14 billion computer supplies industry at this year's Computer Supplies Expo.



The only show devoted solely to the computer supplies industry

April 19-21, 1996, Hotel del Coronado  
San Diego, California

For more information  
call 1-800-466-7500

sponsored by **DATA SYTEK**

